



Entergy Operations, Inc.  
River Bend Station  
5485 U.S. Highway 61  
P. O. Box 220  
St. Francisville, LA 70775  
Tel 225 336 6225  
Fax 225 635 5068

**Rick J. King**  
Director  
Nuclear Safety Assurance

November 27, 2001

Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Subject: Environmental Operating Report  
Reference: Docket No. 50-458  
File Nos. G9.5, G9.25.1.5

RBF1-01-0260  
RBG-45882

Enclosed is the Annual Environmental Operating Report (Non-radiological) for the period August 29, 2000, to August 28, 2001. This report is submitted in accordance with Subsection 5.4.1 of Appendix B (Environmental Protection Plan) to River Bend Station License Number NPF-47.

If there are any questions, please contact Mr. Bill Spell at (225) 381-3701.

Sincerely,

A handwritten signature in cursive script that reads "Rick J. King".

RJK/WJF  
enclosure

IE25

Environmental Operating Report 50-458

November 27, 2001

RBG-45882

Page 2 of 2

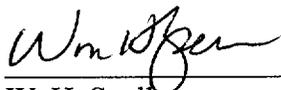
cc: U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011

NRC Resident Inspector  
P.O. Box 1050  
St. Francisville, LA 70775

**RIVER BEND STATION  
ENVIRONMENTAL OPERATING REPORT FOR 2000/2001**

August 29, 2000 - August 28, 2001

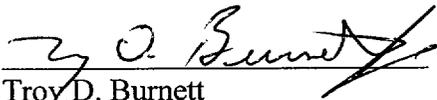
Prepared By:



---

W. H. Spell  
Environmental Specialist - Sr. Lead

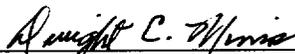
Reviewed By:



---

Troy D. Burnett  
Supt. Chemistry / Environmental

Approved By:



---

Dwight C. Mims  
General Manager Plant Operations

**RIVER BEND STATION  
ENVIRONMENTAL OPERATING REPORT FOR 2000/2001**

LIST OF TABLES & ENCLOSURES

Table 1.                    Non-routine Reports to Federal, State and Local Regulatory Agencies

# RIVER BEND STATION ENVIRONMENTAL OPERATING REPORT FOR 2000/2001

## TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION/OBJECTIVES	1
2.0 ENVIRONMENTAL PROTECTION ISSUES	1
2.1 Aquatic Issues	1
2.2 Terrestrial Issues	2
2.3 Noise Issues	2
3.0 CONSISTENCY REQUIREMENTS	2
3.1 Plant Design and Operation	2
3.2 Reporting Related to NPDES Permit and State Certification	3
3.3 Changes Required for Compliance with Other Environmental Regulations	3
4.0 ENVIRONMENTAL CONDITIONS	3
4.1 Unusual or Important Environmental Events	3
4.2 Environmental Monitoring	3
4.2.1 Aquatic Monitoring	3
4.2.2 Terrestrial Monitoring	3
4.2.3 Noise Monitoring	4
5.0 ADMINISTRATIVE PROCEDURES	4
5.1 Review and Audit	4
5.2 Records Retention	4
5.3 Changes in Environmental Protection Plan	5
5.4 Plant Reporting Requirements	5
5.4.1 Routine Reports	5
5.4.2 Non-routine Reports	5

# **RIVER BEND STATION**

## **ENVIRONMENTAL OPERATING REPORT FOR 2000/2001**

### **1.0 INTRODUCTION/OBJECTIVES**

The Annual Environmental Operating Report for the period of August 29, 2000 (anniversary of license issuance) through August 28, 2001 is submitted in accordance with Subsection 5.4.1 of Appendix B to River Bend Station Facility Operating License Number NPF-47. River Bend Station (RBS) consists of a 936 MWE General Electric boiling water reactor located on a 3,342 acre site in West Feliciana Parish, Louisiana, 4.1 km (2.5 MI) southeast of St. Francisville. Waste heat from RBS is dissipated via systems using five mechanical draft cooling towers, which draw makeup water from the Mississippi River, 3.3 (air) km (2.0 MI) to the southwest. Blowdown from the normal cooling tower system is discharged to the Mississippi River through a submerged pipe about 200 meters (660 ft) downstream from the makeup water intake. Appendix B to the RBS operating license is the Environmental Protection Plan (Non-radiological), or EPP, which has the following principal objectives:

1. To verify that the facility is operated in an environmentally acceptable manner, as established in the Final Environmental Statement Related to the Operation of River Bend Station (NUREG-1073, commonly referred to as the FES-OL) and other Nuclear Regulatory Commission (NRC) impact assessments.
2. To coordinate NRC requirements and maintain consistency with other Federal, State, and local requirements for environmental protection.
3. To keep the NRC informed of the environmental effects of facility construction and operation and of actions taken to control these effects.

### **2.0 ENVIRONMENTAL PROTECTION ISSUES**

In the FES-OL dated January 1985, the NRC staff considered the environmental impacts associated with the operation of River Bend Station Unit 1. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

#### **2.1 Aquatic Issues**

There were no specific aquatic issues identified by the NRC staff in the FES-OL. Environmental concerns, which relate to water quality, are regulated by way of the facility Louisiana Pollutant Discharge Elimination System (LPDES) Permit.

# RIVER BEND STATION

## ENVIRONMENTAL OPERATING REPORT FOR 2000/2001

### 2.2 Terrestrial Issues

Salt drift deposition from the normal cooling towers may cause changes in, or damage to, nearby vegetation on RBS property (FES-OL Section 5.5.1). A monitoring program to identify the extent of impacts and the actions necessary to mitigate, if any, is specified in EPP Section 4.2.2.

### 2.3 Noise Issues

Operation of the normal cooling towers, the service water cooling tower and main station transformers at RBS may increase noise levels at nearby residences (FES-OL Section 5.12). A monitoring program to identify the extent of impacts and the actions necessary to mitigate, if any, is specified in EPP Section 4.2.3.

## 3.0 CONSISTENCY REQUIREMENTS

### 3.1 Plant Design and Operation

In accordance with the EPP, RBS personnel prepare and record an environmental evaluation of any proposed change in plant design or operation or performance of any test or experiment that may significantly affect the environment. Such evaluations are not performed on activities that do not affect the environment or are required for compliance with non-NRC environmental regulations. The environmental evaluation process is administered through programs governing design modification and the development/revision of written procedures. Before engaging in additional construction or operational activities which may significantly affect the environment, a determination is made and recorded as to whether any proposed change involves an Unreviewed Environmental Question Determination (UEQD). A proposed activity involves a UEQD if it concerns:

- a) A matter which may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or any decisions of the Atomic Safety and Licensing Board;
- b) A significant change in effluent or power levels; or
- c) A matter not previously reviewed and evaluated in the documents specified in (a) above, which may have a significant adverse environmental impact.

If the activity meets any of these criteria it must either not be performed as proposed or a written evaluation must be prepared and submitted for prior NRC approval.

## **RIVER BEND STATION**

### **ENVIRONMENTAL OPERATING REPORT FOR 2000/2001**

During the reporting period covered by this report no changes at RBS were determined to involve unreviewed environmental questions. Records of environmental determinations are maintained in the station Permanent Plant File as part of documentation associated with the modification request program and/or the procedure development system.

#### 3.2 Reporting related to the NPDES Permit and State Certification

On August 27, 1996 the Louisiana Department of Environmental Quality (LADEQ) received approval from the U.S. Environmental Protection Agency (USEPA) to assume authority for the NPDES program. LADEQ issued a Louisiana Pollutant Discharge Elimination System (LPDES) permit which became effective on November 1, 1999 and replaced the existing state and federal permits. No change to the LPDES permit was made during the period covered by this report.

#### 3.3 Changes Required for Compliance with Other Environmental Regulations

During the period covered by this report there were no changes in plant design or operation or the performance of tests or experiments required to achieve compliance with non-NRC environmental regulations at River Bend Station.

### 4.0 ENVIRONMENTAL CONDITIONS

#### 4.1 Unusual or Important Environmental Events

During the period covered by this report there were no unusual or important events, causally related to RBS operation, which resulted in significant environmental impacts.

#### 4.2 Environmental Monitoring

##### 4.2.1 Aquatic Monitoring

Water quality monitoring was performed in accordance with the requirements established in the station's LPDES permit. Results were documented in monthly Discharge Monitoring Reports and non-routine reports (Table 1), as required, and submitted to LADEQ.

##### 4.2.2 Terrestrial Monitoring

Subsection 4.2.2 of the EPP requires aerial photography beginning two years prior to cooling tower operation and during the following first and third years of operation. This requirement was completed in 1989 when the "third year" set of

# RIVER BEND STATION

## ENVIRONMENTAL OPERATING REPORT FOR 2000/2001

stereo color infrared transparencies was monitored. During this reporting period, terrestrial monitoring and monitoring for the existence of new oil and gas wells and pipelines was performed during the performance of the land use census. No significant changes in vegetative communities or individual trees, attributable to salt drift impacts, were found in the immediate area surrounding the cooling towers. Additionally no changes in the number or size of wellheads, pipelines or transmission line right-of-ways were identified within two miles of the River Bend site.

### 4.2.3 Noise Monitoring

The requirement to conduct an environmental noise monitoring program (EPP Subsection 4.2.3) was completed during 1986/87 and the results were included in the second annual Environmental Operating Report. In general, the acoustic environment in the vicinity of RBS proved to be substantially more complex than anticipated, but neither the magnitude of increases attributable to plant operation nor community reaction exceeded FES-OL predictions.

## 5.0 ADMINISTRATIVE PROCEDURES

### 5.1 Review and Audit

Entergy Operations, Inc. has provided for the independent review and audit in compliance with the RBS EPP. The main group responsible for audits of EPP related activities, the RBS Quality Assurance Department, reported directly to the Manager-Quality Assurance during the period covered by this report. All findings identified during the reporting period were satisfactorily resolved and did not indicate a significant deterioration of the activities being audited.

### 5.2 Records Retention

Records and logs relative to environmental aspects of plant operation and audit activities are retained in the RBS Permanent Plant File. These records and logs are available to the NRC on request. Records of modifications to station structures, systems, and components determined to potentially affect the continued protection of the environment will be retained for the life of the plant. Other records, data, and logs relating to the EPP will be retained for five years or, where applicable, in accordance with the requirements of the USEPA and LADEQ.

# RIVER BEND STATION

## ENVIRONMENTAL OPERATING REPORT FOR 2000/2001

### 5.3 Changes in Environmental Protection Plan

There were no requests for changes to the EPP during the period covered by this report.

### 5.4 Plant Reporting Requirements

#### 5.4.1 Routine Reports

This Annual Environmental Operating Report was prepared to meet the reporting requirements of EPP Subsection 5.4.1 for the period from August 29, 2000 through August 28, 2001. Summaries and analyses of the results of monitoring programs, including comparisons with related pre-operational studies, operational controls, and previous reports are presented in Section 4.2 above. During the period of this report there were no indications of significant harmful effects or evidence of trends toward irreversible damage to the environment causally related to the operation of River Bend Station. There were no EPP noncompliances during this time period.

#### 5.4.2 Non-routine Reports

A list of all non-routine events from August 29, 2000 through August 28, 2001 that were reportable to other Federal, State, or Local agencies in accordance with their reporting requirements in lieu of requirements of EPP Subsection 5.4.2 are listed in Table 1.

**RIVER BEND STATION  
ENVIRONMENTAL OPERATING REPORT FOR 2000/2001**

TABLE 1  
NONROUTINE REPORTS TO FEDERAL AND STATE  
LOCAL REGULATORY AGENCIES

<b>LETTER DATE</b>	<b>TYPE</b>	<b>RECIPIENT(S)*</b>	<b>DOCUMENT</b>
2-2-01	Letter	LADEQ	RBG-45639
4-26-01	Letter	LADEQ	RBG-45725
5-2-01	Letter	LADEQ	RBG-45731
6-12-01	Letter	LADEQ	RBG-45750
6-28-01	Letter	LADEQ	RBG-45758

\* Agency abbreviations: LADEQ = Louisiana Department of Environmental Quality