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James J. Fisicaro  
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December 1, 1995

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Mail Stop P1-37  
Washington, D.C. 20555

Subject: River Bend Station - Unit 1  
Docket No. 50-458  
License No. NPF-47  
Licensee Event Report 50-458/95-009-00

File Nos. G9.5, G9.25.1.3

RBG-42211  
RBF1-95-0290

Gentlemen:

In accordance with 10CFR50.73, enclosed is the subject report.

Sincerely,

JJF/MC/jr  
enclosure

050034

9512050206 951201  
PDR ADOCK 05000458  
S PDR

JE22

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

NRC Resident Inspector  
P. O. Box 1051  
St. Francisville, LA 70775

INPO Records Center  
700 Galleria Parkway  
Atlanta, GA 30339-3064

Mr. C. R. Oberg  
Public Utility Commission of Texas  
7800 Shoal Creek Blvd., Suite 400 North  
Austin, TX 78757

Louisiana Department of Environmental Quality  
Radiation Protection Division  
P.O. Box 82135  
Baton Rouge, LA 70884-2135  
ATTN: Administrator

## LICENSEE EVENT REPORT (LER)

(See reverse for required number of  
digits/characters for each block)ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION  
COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED  
INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS  
REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT  
BRANCH (7-6 F331 U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-  
0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF  
MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

River Bend Station

DOCKET NUMBER (2)

05000-458

PAGE (3)

1 OF 4

TITLE (4)

MISSED SURVEILLANCE DUE TO SURVEILLANCE TEST INTERVAL SCHEDULING CHANGE ERROR

EVENT DATE (6)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER	
11	01	95	95	-- 06 -- 00		12	01	95	N/A	05000	
									N/A	05000	
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
POWER LEVEL (10)		97.5	20.2201(b)			20.2203(a)(2)(v)			x	50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)			20.2203(a)(3)(i)				50.73(a)(2)(ii)	50.73(a)(2)(x)
			20.2203(a)(2)(i)			20.2203(a)(3)(ii)				50.73(a)(2)(iii)	73.71
			20.2203(a)(2)(ii)			20.2203(a)(4)				50.73(a)(2)(iv)	OTHER
			20.2203(a)(2)(iii)			50.36(c)(1)				50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iv)			50.36(c)(2)				50.73(a)(2)(vii)	

## LICENSEE CONTACT FOR THIS LER (12)

NAME

D. N. Lorring, Supervisor - Licensing.

TELEPHONE NUMBER (include Area Code)

504-381-4157

## COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

## SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).	X NO	EXPECTED SUBMISSION	MONTH	DAY	YEAR
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## ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On November 1, 1995, at 1030 hours with the plant in Mode 1 (Power Operation), while performing research to upgrade surveillance test procedures, it was discovered that Technical Specification (TS) instrumentation flow signal calibration adjustment surveillance requirements had not been performed at the specified surveillance test interval (STI). A previous TS amendment (74) changed the Average Power Range Monitor (APRM) Flow Biased Simulated Thermal Power-High channel functional STI from weekly to quarterly, but was silent regarding the existent weekly calibration flow adjustment requirement. The scheduled frequency of the surveillance test procedures (STPs) which performed both requirements was changed to quarterly on the basis of the Amendment 74 channel functional STI change. The affected equipment was immediately tested and determined operable.

The root cause of this event was human error and inadequate review/controls during implementation of TS Amendment 74. Immediate corrective actions to schedule the applicable STPs at the specified STI have been completed. Long term enhancements to the TS amendment implementation process are being identified. This event was not safety significant.

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	458	95	-- 09	-- 00	

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Reported Condition

On November 1, 1995, at 1030 hours with the plant in Mode 1 (Power Operation), while performing research to upgrade surveillance test procedures, it was discovered that Technical Specification (TS) instrumentation flow signal calibration adjustment surveillance requirements had not been performed at the specified surveillance test interval (STI). The failure to perform surveillance testing as required by the Technical Specifications is reportable in accordance with 10CFR50.73(a)(2)(i)(B) as operation prohibited by plant TS.

Investigation

The Reactor Protection System (RPS) Average Power Range Monitor (APRM) Flow Biased Simulated Thermal Power-High Trip Function monitors neutron flux to approximate the thermal power being transferred to the reactor coolant. Trip level is varied as a function of recirculation drive flow but is clamped at an upper limit that is always lower than the APRM Fixed Neutron Flux-High Trip to provide protection against transients where thermal power increases slowly and protects the fuel cladding integrity by ensuring that the minimum critical power ratio safety limit is not exceeded. The logic consists of two independent trip systems with four channels. Each channel consists of two APRM inputs either of which will trip the channel. The trip system logic is one out of two channels taken twice.

Through Amendment 72, RBS TS 4.3.1.1 required a weekly channel functional, weekly calibration flow adjustment and semi-annual channel calibration for this instrument function. The weekly calibration flow adjustment was accomplished during performance of the surveillance test procedures (STPs) which also performed the weekly channel functional.

Amendment 74 to RBS TS was issued August 2, 1994 with a 60 day implementation period from date of issue. The major effects of the amendment were to extend the allowable out-of-service times and channel functional STIs of specified instruments. The amendment also imposed a more restrictive requirement on the STI for the RPS manual scram function and a new trip unit setpoint calibration surveillance requirement for the Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) instrument.

The amendment was implemented August 25, 1994 with the more restrictive change to the RPS manual scram STP surveillance test interval, but absent the STPs necessary to perform the new ATWS-RPT calibration requirement imposed by Amendment 74. This resulted in LER 94-029 on November 18, 1994.

The less restrictive channel functional STI frequency changes were processed under newly established administrative change process controls for the STP Data Base scheduling program on September 1, 1994. The schedule interval of the STPs which performed the APRM Flow Biased Simulated Thermal Power-High channel functional was changed to quarterly as provided for in Amendment 74. This change to the STPs' scheduled frequency did not take into account the fact that the weekly calibration flow adjustment requirement, not addressed by Amendment 74, was also performed within the same STPs. This changed the actual performance interval of the weekly calibration surveillance requirement to quarterly without proper authorization. The STPs continued to be performed on a weekly basis until October, 1994, to facilitate an orderly transition to the Amendment 74 STIs. At that time, the STPs were scheduled and performed on a frequency which failed to meet the specified weekly calibration flow adjustment for TS 4.3.1.1.

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(NOTE: RBS implemented TS Amendment 81, which improved and reformatted TS in accordance with NUREG-1434, on October 1, 1995. Subsequent TS references reflect the current Amendment 81 TS numbering.)

On November 1, 1995, while performing research to revise the subject STPs as part of the procedure upgrade project, it was discovered that surveillance requirement (SR) 3.3.1.1.3 which specifies a 7 day frequency to "Adjust the channel to conform to a calibrated flow signal" was actually being performed on a quarterly basis. Actions were immediately taken to perform the applicable portions of the subject STPs under TS SR 3.0.3. Testing was completed satisfactorily, with no adjustments necessary, on the date of discovery. Actions have been completed to schedule the required surveillance test performances on a 7 day basis.

**Root Cause**

The root cause of this condition was human error and inadequate review/controls during implementation of TS Amendment 74. The error occurred when the schedule frequency of the subject STPs was changed to reflect the Amendment 74 channel functional quarterly STI without provisions for the unchanged weekly calibration requirement performed by these same STPs. There were no specific procedural provisions for the identification, technical review or verification of TS surveillance requirements and procedure changes necessary to support implementation of TS amendments at the time of Amendment 74 implementation.

In addition, the formatting of TS, at that time, referenced all surveillance requirements and their associated STIs to one surveillance number regardless of the instrument function. Amendment 74 TS 4.3.1.1 was the single surveillance number for 13 different RPS instrument functions each of which had multiple combinations of channel check, channel functional and calibration requirements and STIs.

LER 94-029 also documented missed surveillances due to inadequate review during implementation of TS Amendment 74. STPs were not revised to include actions necessary to meet the new more restrictive ATWS-RPT calibration requirement imposed by Amendment 74. The appropriate personnel were cognizant of the new requirement, but the associated implementing STPs were not changed to include steps necessary to meet the new requirement by the effective date of Amendment 74. Corrective actions for LER 94-029 addressed issues which focused on ensuring that Amendment 74 requirements were properly implemented.

This LER (95-09) identifies an inappropriate change to the scheduling frequency of existing STPs for an existing surveillance requirement on which Amendment 74 was silent. The corrective actions for LER 94-029 could not reasonably have been expected to identify nor prevent the occurrence of the LER 95-09 condition as the errors were not similar.

Several LERs involving STP deficiencies with respect to Technical Specifications have been previously submitted and include LERs 92-014, 93-002, 93-005, 93-012, 94-020, 94-021 and 94-026. However, the deficiencies with these LERs have not been attributed to inadequate reviews during the implementation of a TS amendment. Therefore, the root cause and corrective actions identified in these LERs are not germane to the deficiency described in this LER.

**Corrective Actions**

Applicable portions of the affected STPs were immediately performed on discovery of the test deficiency. These tests confirmed operability of the subject instruments' flow signals. The schedule frequency for these tests has been corrected to reflect the 7 day requirement.



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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Licensing has reviewed all surveillance requirements associated with each instrument function affected by Amendment 74, as well as, the STP Data Base schedule intervals in place following Amendment 74 implementation. No additional surveillance test requirement deficiencies were found.

The inappropriate schedule frequency change that occurred during Amendment 74 implementation has been discussed with the personnel involved.

Implementation of TS Amendment 81 on October 1, 1995, has resulted in several improvements. The improved format provides for unique SR numbering for each surveillance requirement. This will facilitate identification of surveillance requirement changes associated with any given amendment. In addition, the STP Data Base has been revised to include the capability to cross reference each STP to every associated SR number(s) and each SR's frequency and mode applicability. Licensing procedures for processing license document changes also underwent significant revision in September, 1995 to support Amendment 81 implementation.

Specific implementation process improvements directed at the identification, review and revision requirements associated with all phases of the RBS license document change implementation process will be evaluated by a multi-discipline team to enhance the RBS process for implementing license document changes. Corrective actions will be assigned to the responsible departments to track completion of the process changes deemed necessary.

**Safety Assessment**

The TS surveillance requirements for the operability test of the trip units was successfully performed November 1, 1995 with no calibration adjustments required. This provides assurance that the trip units have been operable and capable of performing their design basis function in the interim between their last scheduled performance in early October, 1995 and the date of discovery.

Historical surveillance results for the affected instruments from 8/27/94 to 11/1/95 were researched to determine if calibration adjustments had been required. No calibration adjustments were made for any of these STP performances. Past surveillances have demonstrated that these devices have exhibited very stable setpoint characteristics and have rarely required calibration adjustment.