



GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775
AREA CODE 504 635-8084 541-8661

April 25 , 1990
RBC-32737
File Nos. G9.5, G9.25.1.3

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 Licensee Event Report No. 90-011 for River Bend Station - Unit 1. This report is being submitted pursuant to 10CFR50.73.

Sincerely,

W. H. Odell
Manager-River Bend Oversight
River Bend Nuclear Group

TFP/PDG/RGW/DCH/RKB/pg

cc: U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

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

INPO Records Center
1100 Circle 75 Parkway
Atlanta, GA 30339-3064

9005010335 900425
PDR ADDCK 05000458
S PDC

IE 22
11

LICENSEE EVENT REPORT (LER)

APPROVED ORO NO. 3105-010
EXPIRES 5/31/92

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------|---|--------------|-------------------|--|----------------|--------|-------------------|--------------|--------------------------------------|--|---|--|-----|--|------|--|--------------------------------|--|-----------------|--|---------------------------------|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| FACILITY NAME (1) KIVER BEND STATION | | | | | | | | | | DOCKET NUMBER (2) 0 6 0 0 0 4 5 8 | | | | | | | | | | PAGE 1 OF 0 1 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TITLE (3) Engineered Safety Feature System Actuations Initiated by Circuit Breaker Trip Due to Transformer Failure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EVENT DATE (5) | | | | | | LER NUMBER (6) | | | | | | REPORT DATE (7) | | | | | | OTHER FACILITIES INVOLVED (8) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MONTH | | DAY | | YEAR | | YEAR | | SEQUENTIAL NUMBER | | REVISION NUMBER | | MONTH | | DAY | | YEAR | | FACILITY NAME | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 3 | | 2 6 | | 9 0 | | 9 0 | | 0 1 1 | | 0 0 0 | | 4 2 | | 5 9 | | 0 | | DOCKET NUMBER (8) 0 6 0 0 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 3 | | 2 6 | | 9 0 | | 9 0 | | 0 1 1 | | 0 0 0 | | 4 2 | | 5 9 | | 0 | | 0 6 0 0 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OPERATING MODE (9) | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | 20.402(a) | | | | | | | | | | 20.402(a) | | | | | | | | | | 20.73(a)(2)(iv) | | | | | | | | | | 73.71(b) | | | | | | | | | | | | | | | | | | | |
| POWER LEVEL (10) | | 0 | | | | | | | | | | 20.402(a)(1)(i) | | | | | | | | | | 20.402(a)(1)(i) | | | | | | | | | | 20.73(a)(2)(iv) | | | | | | | | | | 73.71(b) | | | | | | | | | |
| | | | | | | | | | | | | 20.402(a)(1)(ii) | | | | | | | | | | 20.402(a)(1)(ii) | | | | | | | | | | 20.73(a)(2)(iv) | | | | | | | | | | OTHER (Specify in Abstract below and in Text, NRC Form 305A) | | | | | | | | | |
| | | | | | | | | | | | | 20.402(a)(1)(iii) | | | | | | | | | | 20.402(a)(1)(iii) | | | | | | | | | | 20.73(a)(2)(iv)(A) | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 20.402(a)(1)(iv) | | | | | | | | | | 20.402(a)(1)(iv) | | | | | | | | | | 20.73(a)(2)(iv)(B) | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 20.402(a)(1)(v) | | | | | | | | | | 20.402(a)(1)(v) | | | | | | | | | | 20.73(a)(2)(iv) | | | | | | | | | | | | | | | | | | | |
| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NAME L. A. England, Director - Nuclear Licensing | | | | | | | | | | | | TELEPHONE NUMBER AREA CODE 5 0 4 3 8 1 - 4 1 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAUSE | SYSTEM | COMPONENT | MANUFAC TURE | REPORTABLE TO NRC | | CAUSE | SYSTEM | COMPONENT | MANUFAC TURE | REPORTABLE TO NRC | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X | FIA | XIFIMRG | 01810 | Y | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUPPLEMENTAL REPORT EXPECTED (14) | | | | | | | | | | | | EXPECTED SUBMISSION DATE (15) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| X YES (If yes, complete EXPECTED SUBMISSION DATE) | | | | | | | | | | | | NO | | | | | | | | | | MONTH DAY YEAR 1 1 3 10 9 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

At 1320 on 03/26/90 with the unit in cold shutdown (Operational Condition 4), a faulted condition on transformer 1NJS-X1A resulted in a trip of circuit breaker ACB-016 on switchgear 1NJS-SWGR1A. This followed the cross-tieing of load centers 1NJS-LDC1C and 1D. The circuit breaker trip resulted in numerous ESF actuations. Therefore, this report is submitted pursuant to 10CFR50.73(a)(2)(iv).

The 1NJS-X1A transformer has been replaced. GSU continues to investigate the failure of the transformer and will submit a supplemental report by November 30, 1990.

The ESF actuations occurred per design. The plant was in cold shutdown at the time of the event and reactor coolant temperature remained constant at 122 degrees F. Therefore, this event did not adversely affect the health and safety of the public.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

| | | | | | | |
|---|---|----------------|-------------------|-----------------|----------|--|
| FACILITY NAME (1) RIVER BEND STATION | DOCKET NUMBER (2) 0500045890-0111-0002 OF 03 | LER NUMBER (3) | | | PAGE (3) | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | |
| | | | | | | |

TEXT (If more space is required, use additional NRC Form 305A's) (17)

REPORTED CONDITION

At 1320 on 03/26/90 with the unit in cold shutdown (Operational Condition 4), a faulted condition on transformer (*XFMR*) 1NJS-X1A resulted in a trip of circuit breaker ACB-016 (*BKR*) on switchgear 1NJS-SWGR1A (*SWGR*). This followed the cross-tieing of load centers 1NJS-LDC1C and 1D. The circuit breaker trip resulted in the following ESF actuations:

- . A complete Division II isolation (*JM*).
- . Isolation of valves 1E12*MOVFO08 (*20*) and 1E12*MOVFO09 (*20*) (loss of shutdown cooling).
- . Automatic initiation of the standby service water (SSW) (*BI*) pumps (*P*), 1SWP*P2A, 1SWP*2B, and 1SWP*P2D (Division I and II).
- . Automatic initiation of the standby gas treatment (SBGT) system (*BH*) (trains A and B).
- . Automatic initiation of the fuel building filtration system (*VG*) (trains A and B).
- . Automatic initiation of the containment atmosphere and leakage monitoring system (*IK*) (CMS) (train B).

This report is submitted pursuant to 10CFR50.73(a)(2)(iv) to document these ESF actuations.

INVESTIGATION

The investigation that followed the event revealed that the loss of the 'B' RPS bus (Division II normal supply) resulted in the isolation of valves 1E12*MOVFO08 and F009, and the Division II isolation. The signal that resulted from the trip of ACB-016 resulted in a closed cooling water system (CCP) low pressure signal due to the loss of power to 1CCP-P1A. This caused the initiation of SSW pumps 1SWP*P2A, 1SWP*P2B, and 1SWP*P2D. The Division III SSW pump did not start because there is no initiation signal on CCP low system pressure. The automatic initiations of the annulus mixing system, SBGT, fuel building filter trains, and CMS 'B' were all a result of a direct isolation signal or low system flow due to the loss of the 'B' RPS bus.

A visual inspection of the 13.8 KV breaker cubicle revealed the protective relays tripped on instantaneous overcurrent. The protective relays for all three phases was the reason for the breaker tripping at the time of the fault. Further investigation revealed that 1NJS-X1A transformer had faulted on the high side of the transformer.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104
EXPIRES 8/31/85

| | | | | | | | |
|---|--|----------------|-------------------|-----------------|----------|-----|--|
| FACILITY NAME (1) RIVER BEND STATION | DOCKET NUMBER (2) 0 5 0 0 0 4 5 8 2 0 | LER NUMBER (5) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| | | 0 1 1 | 0 0 | 0 3 | OF | 0 3 | |

TEXT (If more space is required, use additional NRC Form 368A's) (17)

A review of previously submitted LERs has found two events in which failures of 13.8 KV transformers have resulted in ESF actuations. LER 86-021 reported a reactor scram followed by an injection of the high pressure core spray (HPCS) system. This was due to the failure of the high side disconnect switch on the 1NJS-X2F transformer, apparently due to moisture buildup inside the transformer enclosure. Corrective action included modifications to address the moisture buildup problem. LER 86-055 reported a reactor scram due to the failure of transformer 1NJS-X2E. Tests indicated that this was due to grounded windings.

CORRECTIVE ACTION

The 1NJS-X1A transformer has been replaced. GSU continues to investigate the failure of the transformer and will submit a supplemental report by November 30, 1990.

SAFETY ASSESSMENT

The ESF actuations occurred per design. The plant was in cold shutdown at the time of the event and reactor coolant temperature remained constant at 122 degrees F. Therefore, this event did not adversely affect the health and safety of the public.

NOTE: Energy Industry Identification System Codes are identified in the text as (*XX*).