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October 23, 2000

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: River Bend Station
Docket No. 50-458
License No. NPF-47
Licensee Event Report 50-458 / 00-014-00

File Nos. G9.5, G9.25.1.3

RBG-45529
RBF1-00-0229

Ladies and Gentlemen:

In accordance with 10CFR50.73, enclosed is the subject Licensee Event Report. The subject event is being reviewed through the corrective action review process.

Sincerely,

RJK/dlm
enclosure

IE22

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

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St. Francisville, LA 70775

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NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION (6-1998)	APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001
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 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), 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. If an information collection does not display a currently valid OMB control number, the NRC may

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TITLE (4)
Post Maintenance Document Review Discovered 9-hour Period of Concurrent Inoperability of Two Emergency Diesel Generators

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MON	DA	YEAR	YEAR	SEQUEN	REVISI	MONT	DA	YEAR	FACILITY NAME	DOCKET NUMBER
09	14	2000	2000	014	00	10	23	2000	FACILITY NAME	DOCKET NUMBER

OPERATI MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
POWER	100%	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)	X 50.73(a)(2)(v)	Specify in Abstract below or in NRC
		20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)	

LICENSEE CONTACT FOR THIS LER (12)	
NAME J. W. Leavines, Manager – Licensing	TELEPHONE NUMBER (Include Area Code) 225-381-4642

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED	MONT	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) **(16)**

On September 21, 2000, at 1138 with the plant in Mode 1 (Power Operation) at 100 percent power, a system engineer discovered through post-maintenance review of documentation that Division 1 and Division 2 Emergency Diesel Generators (EDG) (**DG**) had been inoperable for a concurrent period of about nine hours on August 30, 2000. This overlap was not discovered until a review of documentation after the fact revealed the condition. This event is being reported in accordance with 10CFR50.73(a)(2)(i)(b) as operation prohibited by technical specifications and for the Division 1 EDG, in accordance with 10 CFR 50.73(a)(2)(v) as a condition that alone could have prevented the fulfillment of a safety function.

On August 17, 2000, plant personnel observed that the remote synchronizing selector switch off light (**IL**) was not working. The job was worked on August 21, 2000 but the problem reported could not be reproduced by the maintenance craft. A review of the situation identified that the incorrect EDG panel (**PL**) had been identified. On August 22, 2000, the correct panel was identified to repair the remote synchronizing switch socket on the Division 1 EDG. The job was worked on September 5, 2000. Upon opening the panel, the maintenance crew discovered that the wiring in the affected panel was also damaged.

On August 30, 2000, a surveillance test procedure (STP) was started on the Division 2 EDG. During the performance of the STP, an oil leak was identified on the turbocharger oiling system (**LA**). The EDG was declared inoperable and the oil leak was repaired. At the time the reportability determination was completed on the Division 2 EDG, the extent of the condition on the Division 1 EDG was not known.

A risk assessment that assumed the individual and dual inoperabilities of the EDGs determined that the condition was non-risk significant. Based on this information, the safety significance of this event is minimal.

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REPORTED CONDITION

On September 21, 2000, at 1138 with the plant in Mode 1 (Power Operation) at 100 percent power, a system engineer discovered through post-maintenance review of documentation that Division 1 and Division 2 Emergency Diesel Generators (EDG) (**DG**) had been inoperable for a concurrent period of about nine hours on August 30, 2000. This overlap was not discovered until a review of documentation after the fact revealed the condition. This event is being reported in accordance with 10CFR50.73(a)(2)(i)(b) as operation prohibited by technical specifications and for the Division 1 EDG, in accordance with 10 CFR 50.73(a)(2)(v) as a condition that alone could have prevented the fulfillment of a safety function.

BACKGROUND

The remote synchronizing switch selected light (**IL**) is an indicator located on the local EDG control panel (**PL**). The light is located about seven to eight feet off the floor. Therefore, changing the light bulb can be difficult from floor level unless an elevating device is used to provide better access to the light. Additionally, access to the rear of the light socket requires opening the door to a normally energized panel. The lamp used in the light is a high temperature bulb and is difficult to change.

INVESTIGATION

On August 17, 2000, Operations personnel observed that the remote synchronizing selector switch off light was not working and a maintenance action item (MAI) was written to remove the old lamp base and replace the lamp. The MAI was worked on August 21, 2000 but the problem reported could not be reproduced by the maintenance craft. A subsequent review of the situation identified that the original MAI was written for the incorrect EDG panel. On August 22, 2000, a new MAI was written for the correct panel to repair the remote synchronizing switch socket on the Division 1 EDG. The second MAI was worked on September 5, 2000. Upon opening the panel, the maintenance crew discovered that the wiring in the affected panel was also damaged. Panel wiring to the light socket was found burned loose in the panel and still energized with 125-volt direct current (VDC). The control power fuses (**FU**) supplying the circuit were not blown. A condition report (CR) was written and the Division 1 EDG was declared inoperable. Further evaluation of the condition to determine the date of failure was inconclusive; however, the damage was assumed to exist from the time the MAI was written on August 21, 2000 until discovery on September 5, 2000. This period of time exceeded the TS allowed outage time of 72 hours for one inoperable EDG. The station conservatively assumed this condition rendered the EDG inoperable because of the potential impact of a seismic event on the loose, energized wiring found in the panel. Additional testing is being considered that may ultimately determine that the EDG would have remained operable.

On August 30, 2000, a surveillance test procedure (STP) was started on the Division 2 EDG. During the performance of the STP, an oil leak was identified on the turbocharger oiling system (**LA**). Plant Engineering assessment of the leak indicated that the pipe repair should not be delayed. A CR was written and the Division 2 EDG was declared inoperable. Subsequently, the oil leak was repaired.

Both of the CRs noted above contain action items to assess the impact of the reported condition on the other EDG. However, the extent of the condition on the Division 1 EDG was not known at the time that the Division 2 EDG was made inoperable. The Division 2 EDG was operable at the time the extent of the condition on the Division 1 EDG was discovered. Both of the action items determined that there was no effect on the other EDG. Since the Division 2 EDG was restored to operability within the LCO time limits, the condition was deemed not reportable at the time.

Technical Specifications (TS) 3.8.1 requires three EDGs to be operable in modes 1,2 and 3. The TS provides that if two required EDGs are inoperable, two hours are permitted to return one EDG to service or the plant is required to be in hot shutdown in 12 hours. During the August 30, 2000 STP on the Division 2 EDG, the required two hour allowed outage time (AOT) for concurrent inoperability was exceeded because the extent of the condition on the Division 1 EDG was not known.

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However before the time required for the plant to be in hot shutdown (12 hours), the Division 2 EDG was returned to service.

The Division 1 EDG was later determined to have been continuously inoperable for about 15 days based on the assumed time of failure of the light socket. This exceeds the TS required 72 hours to restore one required EDG.

CAUSE ANALYSIS AND IMMEDIATE CORRECTIVE ACTIONS

An Engineering analysis concluded that the presence of the condition simultaneous with a safe shutdown earthquake and a loss of offsite power could potentially result in a loss of the Division 1 safety-related bus automatic undervoltage transfer function. The loose wires are part of the direct current (DC) control circuit for the normal power supply breaker (**BKR**) to the Division 1 safety-related bus. With the wires damaged, a potential short condition was created. If the wires contacted each other, the control power fuses could blow and, coupled with a loss of offsite power, the normal supply breaker would not trip from the bus. The normal supply breaker must trip to set contacts in the EDG output breaker and allow the EDG to automatically supply the bus. Therefore, the safety function for the Division 1 EDG to automatically supply the safety-related bus could not be completed.

The Engineering review indicated that the normal supply breaker could have been manually tripped thereby restoring the automatic functions for the Division 1 EDG output breaker. However, the manual operator action is not included in plant procedures.

Each EDG was repaired and restored to service as described, within the individual allowed outage time for each condition. The extent of the impact of the wiring problem on the Division 1 EDG was not known and was not apparent at the time the MAI was written. This was detected only on subsequent examination of the wiring inside of the panel, as part of the work to repair the light.

Additional actions are being determined through the corrective action process.

PREVIOUS OCCURRENCE EVALUATION

A review of previous LERs did not identify any similar concurrent inoperability for the EDGs.

SAFETY SIGNIFICANCE

A risk assessment that postulated the individual and concurrent inoperabilities of the EDGs determined that the condition was non-risk significant. Based on this information, the safety significance of this event is minimal.

(Note: Energy industry component identification codes are annotated in the text as (**XXX**).)