Entergy Operations

Entergy Operations, Inc.
P.O. Box 756
Port Gibson, MS 39150
Tel 601-437-6409

W. T. Cottle
Vice President
Nuclear Operations

December 11, 1990

U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D.C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Standby Fresh Air Unit
Actuation Due To Inadequate
Test Instruction
LER 90-024
AECM-90/0218

Attached is Licensee Event Report (LER) 90-024 which is a final report.

Yours truly,

WTC/RR:cg
Attachment

cc: Mr. D. C. Hintz (w/a)
Mr. R. B. McGehee (w/a)
Mr. N. S. Reynolds (w/a)
Mr. H. L. Thomas (w/o)
Mr. J. L. Mathis (w/a)

Mr. Stewart D. Ebneter (w/a)
Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 2900
Atlanta, Georgia 3032.

Mr. L. L. Kintner, Project Manager (w/a)
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop 11D21
Washington, D.C. 20555

LER90024/SCMPFLR - 1

IE22

NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Grand Gulf Nuclear Station - Unit 1	0 5 0 0 0 4 1 1 6	1 OF 0 3

TITLE (4)

Standby Fresh Air Unit Actuation Due To Inadequate Test Instruction

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 NAMES	DOCKET NUMBER(S)
									NA	0 5 0 0 0
1 1	1 4	9 0	9 0	0 2 4	0 0	1 2	1 9	9 0		0 5 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)			
5	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 1 0	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Riley Ruffin / Licensing Specialist	AREA CODE 6 0 1 4 3 7 - 2 1 1 6 7

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
(If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On November 14, 1990 during Refueling Outage 4, a control room isolation and a Standby Fresh Air Unit (SFAU) 'A' actuation occurred. The actuation occurred while personnel were performing a special test following the installation of a new inverter.

During the test, power was lost to a load distribution panel resulting in an isolation and an automatic start of the SFAU. The loss of power occurred when the alternate source of power was removed from a load distrubution panel prior to the main source being placed in service.

The incident is attributed to an inadequate test instruction which was used to perform the test. The instructions did not instruct personnel to reconnect a cable which was required to be disconnected in a previous step in the instruction.

Power was restored to the load distribution panel by closing the previously opened breaker. The test instructions were corrected prior to continuing the test of the system.

There was no adverse impact on safety due to the occurrence. All systems performed as designed. Conditions were restored to normal approximately 20 minutes following the event.

LER90024/SCMPFLR

NRC Form 366 (9-83)

NRC Form 366A (9-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Grand Gulf Nuclear Station	0 5 0 0 0 4 1 6	9 0	— 0 2 4	— 0 0	0 2 OF 0 3

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

A. Reportable Occurrence

On November 14, 1990, a control room isolation and a Division I Control Room Standby Fresh Air Unit (EIIS Code: VI; SFAU) received an automatic start signal. The signal was generated due to a loss of power to a load distribution panel. The event is reported pursuant to 10CFR50.73(a)(2)(iv).

B. Initial Conditions

The plant was in Operational Condition 5, Refueling, at the time of the occurrence.

C. Description of Occurrence

During Refueling Outage 4, a Design Change was performed to replace several inverters in the Uninterruptible Power Supply (UPS) System, one being inverter 1Y87. During implementation of the design change, power for load distribution panel 1Y89 was being supplied by the old inverter (1Y87) which was to be replaced through a spare main breaker.

Following the design change, a Division I Class 1E UPS System test was scheduled to be performed. The test was conducted in accordance with an approved Special Test Instruction.

On November 14, 1990 during the special test of the UPS, personnel were instructed by the test instruction to open the spare main breaker. Upon opening the spare main breaker, the load distribution panel was deenergized resulting in a loss of power to a portion of the reactor low water level logic. The deenergized logic simulated a LOCA signal to the Containment Isolation System (EIIS Code: JM) resulting in an isolation of the control room and a SFAU actuation. Power was restored to the load distribution panel by closure of the previously opened spare main breaker. The test instruction was corrected prior to continuing the test of the system.

D. Apparent Cause

Upon investigating the event, it was determined that one end of a cable, disconnected in a previous step, was not reconnected. The reconnection step was omitted from the test instruction.

The special test instruction instructed personnel to disconnect the lead, but did not instruct personnel to reconnect the lead. Therefore, the loss of power to the load distribution panel is attributed to a deficiency in the special test instruction.

There were two contributing factors associated with the occurrence. The technical reviewer of the special instruction did not identify the procedural deficiency. Although an error was made during the review of the special instructions, investigations concluded that the error was not due to a programmatic deficiency. Additionally, the test was successfully performed on three other panels prior to the event. During the previous tests, a different engineer ensured the cables were connected but failed to correct the test.

E. Supplemental Corrective Actions

The special test instructions were corrected prior to continuing the test.

The Test Directors and Technical Reviewers were counseled on Verbatim Compliance and the importance of adequate reviews for any and all special tests.

Administrative Controls were determined to adequately address the technical review process.

F. Safety Assessment

There was no adverse impact on safety due to this occurrence. The Control Room Ventilation System performed as designed. The inadvertent control room isolation and start of the "A" SFAU placed the control room in a conservative condition to ensure that there was no exposure hazards to personnel in the control room. Conditions were restored to normal approximately 20 minutes following the event.