



ENTERGY

Entergy Operations, Inc.

P.O. Box 756

Port Gibson, MS 39150

Tel 601 437 2800

C. R. Hutchinson

Vice President

Operations

Grand Gulf Nuclear Station

May 18, 1995

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

Attention: Document Control Desk

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Unplanned ESF Actuation While Performing
Breaker Overcurrent Protection Surveillance
LER 95-005-00

GNRO-95/00063

Gentlemen:

Attached is Licensee Event Report (LER) 95-005 which is a final report.

Yours truly,

CRH/CDH
attachment

cc:

Mr. J. E. Tedrow (w/a)
Mr. H. W. Keiser (w/a)
Mr. R. B. McGehee (w/a)
Mr. N. S. Reynolds (w/a)
Mr. H. L. Thomas (w/o)

Mr. Stewart D. Ebner (w/a)
Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 2900
Atlanta, Georgia 30323

Mr. P. W. O'Connor
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop 13H3
Washington, D.C. 20555

9505250277 950518
PDR ADDCK 05000416
S PDR

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bcc: Ms. C. W. Gunn (w/a)
Mr. C. D. Holifield (w/2)
Mr. G. S. See (w/a)
Mr. G. D. Swords (w/a)
Required Reading Coordinator (w/a)
SRC Secretary (w/a)
File (LCTS/RPTS) (w/a)
File (NS&RA) (w/a)
File (Central) (w/a) (7)

INPO Records Center (w/a)
700 Galleria Parkway
Atlanta, Georgia 30339-5957

Mr. W. T. Donovan (w/a)
Illinois Power Company
Clinton Power Station Mail Stop V-920
P.O. Box 678
Clinton, Illinois 61727

ccmail: Mr. P. W. Alberstadt (ECH)
Mr. S. A. Bennett (ANO)
Mr. C. A. Bottemiller
Mr. O. P. Bulich (RB)
Mr. R. F. Burski (W3)
Mr. J. H. Crabill (ANO)
Mr. L. F. Dale
Mr. L. F. Daughtery
Mr. G. G. Davie (W3)
Mr. J. G. Dewease (ECH)
Mr. M. A. Dietrich
Mr. J. P. Dimmette
Mr. C. M. Dugger
Mr. J. L. Ensley (ESI)
Mr. J. J. Fisicaro (RB)
Mr. T. J. Gaudet (W3)
Mr. C. C. Hayes
Mr. M. G. Hurley
Mr. C. R. Hutchinson
IEA (ANO)
Ms. S. B. Mahoney
Ms. J. M. Manzella (W3)
Mr. M. J. Meisner
Mr. D. C. Mims (ANO)
Mr. R. V. Moomaw
Mr. D. L. Pace
Mr. R. L. Patterson
Mr. T. E. Reaves (ECH)
Mr. J. C. Roberts (ECH)
Mr. J. L. Robertson
Mr. T. H. Thornton
Mr. D. W. Vinci (W3)
Ms. D. S. Waldron (ANO)
Mr. D. H. Wells (RB)

NRC FORM 366 (5-92)						U.S. NUCLEAR REGULATORY COMMISSION						APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95																										
LICENSEE EVENT REPORT (LER)												ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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) Grand Gulf Nuclear Station, Unit 1												DOCKET NUMBER (2) 05000-416						PAGE (3) 1 of 3																				
TITLE (4) Unplanned ESF Actuation While Performing Breaker Overcurrent Protection Surveillance																																						
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						DOCKET NUMBER					
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04			19			95			95			005			00			05			18			95			N/A						05000					
OPERATING MODE (9)						5						THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more (11))																										
POWER LEVEL (10)						0						20.402(b)						20.405(c)						<input checked="" type="checkbox"/> 50.73(a)(2)(iv)						73.71(b)								
												20.405(a)(1)(i)						50.36(c)(1)						50.73(a)(2)(v)						73.71(c)								
												20.405(a)(1)(ii)						50.36(c)(2)						50.73(a)(2)(vii)						OTHER								
												20.405(a)(1)(iii)						50.73(a)(2)(i)						50.73(a)(2)(viii)(A)						(Specify in abstract below and in text, NRC Form 366A)								
												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 Charles Holifield / Licensing Engineer												TELEPHONE NUMBER (Include Area Code) (601)437-6439																										
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						MONTH						DAY						YEAR								
YES (If yes, complete EXPECTED SUBMISSION DATE)						<input checked="" type="checkbox"/> NO						SUBMISSION DATE (15)																										
ABSTRACT (Limit to 1400 spaces, i. e., approximately 15 single-spaced typewritten lines) (16) <p>On April 19, 1995, a surveillance which tests protective trip functions of several AC and DC breakers was performed. When opening breaker 72-11A-33, the control logic for several Engineered Safety Features (ESF) systems was deenergized resulting in several ESF actuations.</p> <p>The cause of the event was reliance on an inadequate impact statement. A contributing cause was an inadequate process used to generate procedural impact statements on surveillance procedures which are infrequently performed.</p> <p>Immediate corrective actions were to reclose the breaker, restore the affected systems to pre-event status and recall the work package for evaluation prior to continued breaker testing. Long-term corrective actions include reviewing the process used to generate surveillance work package impact statements.</p> <p>This event did not pose a threat to the health and safety of the general public. Since this event caused the unplanned automatic actuation of several ESF systems, it is being reported as a valid ESF actuation pursuant to 10CFR50.73(a)(2)(iv).</p>																																						

NRC FORM 366A (5-92)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95		
<p align="center">LICENSEE EVENT REPORT (LER) TEXT CONTINUATION</p>		<p>ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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</p>		
		FACILITY NAME (1) Grand Gulf Nuclear Station, Unit 1	DOCKET NUMBER (2) 05000-416	LER NUMBER (6) 95-005-00

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

A. Reportable Occurrence

When opening DC circuit breaker 72-11A-33, the control logic for several DIV I Engineered Safety Features (ESF) systems was de-energized. Since this caused the unplanned automatic actuation of the associated DIV I ESF systems, this event is being reported as a valid ESF actuation pursuant to 10CFR50.73(a)(2)(iv).

B. Initial Conditions

At the time of the event, the reactor was in OPERATIONAL CONDITION 5 with reactor water temperature indicating approximately 117 degrees F. The unit was in its seventh refueling outage (RFO7) with the Reactor Pressure Vessel (RPV) head removed and reactor water level above the RPV flange. Alternate Decay Heat Removal [BO] (ADHR) was in service providing decay heat removal.

Plant personnel were performing surveillance 06-EL-1R20-R-0001, *Breaker Overcurrent Trip Functional Test*. This surveillance consists of ten tables which list the breakers to be tested. Each refueling outage one of the ten tables is performed to test the overcurrent protective trip function of several AC and DC breakers. Table 9 of the surveillance was being performed during this outage.

C. Description of Occurrence

On April 19, 1995, procedure 06-EL-1R20-R-0001, *Breaker Overcurrent Trip Functional Test*, was being performed. This surveillance is used to test the overcurrent protective trip function of several AC and DC breakers. At 2147, when opening DC breaker 72-11A-33, the control logic for several DIV I ESF systems was de-energized. This caused an unplanned automatic actuation of the following ESF systems:

- Control Room Standby Fresh Air [VI] 'A' initiation
- Combustible Gas Control System [BB] 'A' initiation
- Containment/Drywell [JM] Division I isolation
- Auxiliary Building [NF] Division I isolation
- Standby Service Water System [BI] 'A' initiation
- Standby Gas Treatment System [BH] 'A' initiation
- Auxiliary Building Division I Ventilation [VF] isolation

The Auxiliary Building [NF] Division I isolation caused isolation valves in the Auxiliary Building to close which resulted in a momentary loss of Plant Service Water [KG] (PSW) supply to the ADHR heat exchangers.

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		FACILITY NAME (1) Grand Gulf Nuclear Station, Unit 1	DOCKET NUMBER (2) 05000-416	LER NUMBER (6) 95-005-00

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C. Description of Occurrence (cont'd)

Upon receiving numerous annunciators, the breaker was immediately reclosed and the affected systems were restored to pre-event status in accordance with plant procedures. The Shift Supervisor recalled the work package for review and evaluation before releasing it for continued breaker testing.

D. Apparent Cause

The cause of the event was reliance on a surveillance work package impact statement which did not provide sufficient information concerning component-specific impact to the plant or adequate breaker descriptions. A contributing cause was an inadequate process used to generate impact statements for infrequently performed surveillance procedures.

E. Corrective Actions

Upon receiving numerous annunciators the immediate corrective actions were to reclose the breaker and restore the affected systems to pre-event status in accordance with plant procedures. Also, the Shift Supervisor recalled the work package for evaluation before releasing it for continued breaker testing.

The process of developing impact statements for infrequently performed surveillances will be improved. These enhancements will ensure that the impact statements are included in the work documents.

Additionally, expectations were reinforced to operations personnel that inadequate impact statements should be rejected.

F. Safety Assessment

The consequences of this event were minimal. The Division I containment isolation valves responded as designed when power was lost to their control circuits. Cooling water to ADHR was lost when isolation valves closed, but reactor coolant temperatures remained stable with the reactor vessel flooded for refueling activities. Residual Heat Removal [BO] (RHR) 'A' remained available for decay heat removal with an unaffected cooling water supply during the time the breaker was open. All affected systems were restored to their pre-event status. This event did not pose a threat to the health and safety of the general public.

G. Additional Information

As a result of this event, QDR 0070-95 and IR 95-04-05 were initiated. Energy Industry Identification System (EIIIS) codes are identified in the text within brackets [].