



**ENTERGY**

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January 16, 1996

**C. R. Hutchinson**

Vice President

Operations

Grand Gulf Nuclear Station

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

Attention: Document Control Desk

Subject: Grand Gulf Nuclear Station  
Docket No. 50-416  
License No. NPF-29  
Voluntary Report of High Pressure Core Spray Standby  
Diesel Generator Start on a Valid Initiation Signal  
(LER 96-001)

GNRO-96/00004

Gentlemen:

Attached is Licensee Event Report (LER) 96-001 which is a final report.

Yours truly,

CRH/JEO/

attachment: LER 96-001

cc: Mr. J. E. Tedrow (w/a)  
Mr. R. B. McGehee (w/a)  
Mr. N. S. Reynolds (w/a)

Mr. Leonard J. Callan (w/a)  
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Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
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NRC FORM 366 (5-92)		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95		
<b>LICENSEE EVENT REPORT (LER)</b>					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) <b>Grand Gulf Nuclear Station, Unit 1</b>					DOCKET NUMBER (2) <b>05000-416</b>		PAGE (3) <b>01 of 03</b>
TITLE (4) <b>Voluntary Report of High Pressure Core Spray Standby Diesel Generator Start on a Valid Initiation Signal</b>							
EVENT DATE (5)			LER NUMBER (6)		REPORT DATE (7)		OTHER FACILITIES INVOLVED (8)
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY
11	11	95	<del>95</del> 96	001	00	01	16
OPERATING MODE (9)		1		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more (11))			
POWER LEVEL (10)		90		20.402(b)		20.405(c)	
				20.405(a)(1)(i)		50.73(a)(2)(iv)	
				20.405(a)(1)(ii)		50.73(a)(2)(v)	
				20.405(a)(1)(iii)		50.73(a)(2)(vii)	
				20.405(a)(1)(iv)		50.73(a)(2)(viii)(A)	
				20.405(a)(1)(v)		50.73(a)(2)(viii)(B)	
				20.405(a)(1)(v)		50.73(a)(2)(x)	
						X OTHER	
						(Specify in abstract below and in text, NRC Form 366A)	
						Voluntary Report	
LICENSEE CONTACT FOR THIS LER (12)							
NAME <b>James Owens / Licensing Specialist</b>				TELEPHONE NUMBER (Include Area Code) <b>601-437-6483</b>			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)							
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT
SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED		MONTH	DAY
YES (If yes, complete EXPECTED SUBMISSION DATE)		X NO		SUBMISSION DATE (15)			
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)							
<p>On November 11, 1995, the standby Emergency Diesel Generator (EDG) for the High Pressure Core Spray (HPCS) system auto started when its feeder breaker tripped open on bus undervoltage. The undervoltage condition occurred as the result of a grid disturbance. All systems associated with the HPCS EDG operated as designed with no malfunctions.</p> <p>At the time of this event, there was inclement weather in the general area of the plant site. This bad weather caused the trip of a breaker at a switch yard at Jackson, Mississippi approximately 60 miles away. When the dispatcher attempted to reclose the breaker, it tripped open again, causing the grid disturbance which resulted in the undervoltage trip of the offsite feeder breaker for the HPCS bus. In response to the feeder breaker trip, the HPCS EDG started and picked up the load for the bus.</p> <p>The HPCS EDG response was according to design. There were no malfunctions or Engineered Safety Feature (ESF) actuations associated with this event (the EDGs at Grand Gulf are not ESF equipment). No corrective actions are necessary. This Licensee Event Report (LER) is submitted as a voluntary report.</p>							

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<p align="center"><b>LICENSEE EVENT REPORT (LER)</b></p> <p align="center"><b>TEXT CONTINUATION</b></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) <b>Grand Gulf Nuclear Station Unit 1</b>	DOCKET NUMBER (2) <b>05000-416</b>
<p>TEXT (If more space is required, use additional copies of NRC Form 366A) (17)</p>			
<p><b>A. Reportable Occurrence</b></p> <p>On November 11, 1995, the HPCS EDG [EK] received a valid start signal on bus undervoltage. The bus undervoltage was caused by the trip of a breaker in a switchyard at Jackson, Mississippi, approximately 60 miles away. The breaker reopened after the dispatcher closed it following an initial trip due to bad weather. The second trip of the switchyard breaker resulted in sufficient grid disturbance to cause the HPCS bus offsite feeder breaker to trip on undervoltage. In response to the offsite feeder breaker trip, the HPCS EDG came up to speed as designed and picked up the HPCS bus load.</p> <p>Regulations 10CFR50.72(b)(ii)(B) and 10CFR50.73(a)(2)(iv) require reporting valid initiations of Engineered Safety Feature (ESF) equipment. However, the EDGs are not ESF equipment at Grand Gulf. Therefore, EDG automatic starts are not required to be reported. This voluntary LER is submitted for information only.</p> <p><b>B. Initial Conditions</b></p> <p>At the time of the event the reactor was in OPERATIONAL CONDITION 1 with reactor power of approximately 90 percent. Reactor temperature was approximately 525 F and reactor water level approximately 36 inches.</p> <p><b>C. Description of Occurrence</b></p> <p>On November 11, 1995, the HPCS EDG received a valid start signal when the offsite feeder breaker for the HPCS bus tripped open on bus undervoltage. The bus undervoltage was caused by the trip of a switchyard breaker at Jackson, Mississippi, approximately 60 miles away due to bad weather. The EDG came up to speed and as designed, picked up the HPCS bus load.</p> <p><b>D. Apparent Cause</b></p> <p>At the time of this event, there was inclement weather in the general area of the plant site. This bad weather caused the trip of a breaker at a switch yard approximately 60 miles away. When the dispatcher attempted to reclose the breaker, it tripped open again, resulting in sufficient grid disturbance to cause the undervoltage trip of the offsite feeder breaker for the HPCS bus.</p>			

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<p><b>E. Corrective Actions</b></p> <p>No corrective actions are necessary for this event. All systems functioned properly. No malfunctions occurred as a result of this event. The inclement weather that initiated this event was an act of nature that cannot be prevented, and the EDG start was the proper response to the resultant undervoltage condition.</p> <p><b>F. Safety Assessment</b></p> <p>Neither the conditions that contributed to, nor the start of the HPCS EDG presented a threat to the health and safety of the general public. This event demonstrated that the HPCS EDG would function as designed by starting and loading onto the bus on an undervoltage condition. The Division 1 and 2 EDGs did not start because they were powered from different offsite feeders.</p> <p><b>G. Additional Information</b></p> <p>Energy Industry Identification System (EIIS) codes are identified in the text within brackets [ ].</p>			