



**ENTERGY**

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February 7, 1996

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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  
Unit 1  
Docket No. 50-416  
License No. NPF-29  
1995 Annual Operating Report

GNRO-96/00010

Gentlemen:

Entergy Operations, Inc. is transmitting the Grand Gulf Nuclear Station (GGNS) Unit 1 Annual Operating Report for 1995. This report is in accordance with the reporting program described in Regulatory Guide 1.16, Revision 4, Part C.1.b as modified by the NRC letter to GGNS dated May 25, 1987 (MAEC-87/0131).

Provided as attachments are:

1. A narrative summary of operating experience during the year 1995,
2. Main Steam Line Safety Relief Valve challenges,
3. A tabulated annual report of personnel exposure greater than 100 mrem/yr, and
4. A summary of failed fuel indications/inspections.

Yours truly,

CRH/TMC  
attachments  
cc: (See Next Page)

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## SUMMARY OF OPERATING EXPERIENCE 1995

The following is a summary of Grand Gulf Nuclear Station (GGNS) Unit 1 operating experience for the 1995 calendar year. During 1995, the reactor was critical for 7,039.9 hours with the generator on line for 6,832.0 hours.

On 3/16/95, a reactor scram occurred caused by a pinched-wire ground fault in RCIC minimum flow valve E51F019 and intermittent ground of backup scram valve C11F110A which energized during Division II surveillance (half scram existing). Immediate corrective actions included reworking the ground on the RCIC valve and replacing the backup scram valve solenoid. Also the conduit going to the solenoid was sealed to prevent moisture intrusion. (JC) [LER 95-004] - Duration hours - 37.3

On 4/15/95, the reactor was shut down for Refueling Outage # 7. This outage was extended due to generator stator leak repairs. Duration hours - 1377.1

On 6/11/95, the reactor was manually scrammed to replace Reactor Recirculation Pump "A" #1 Seal. Duration time - 68.7 hours.

On 6/14/95, the reactor was manually scrammed to replace Reactor Recirculation Pump "A" #1 Seal due to second failure. Duration hours - 140.7

On 6/20/95, the reactor was taken off grid for turbine overspeed test. Duration time - 6.8 hours

A reactor scram occurred on 7/3/95. The scram was caused by a trip of Main Turbine and Reactor Feedwater Pumps resulting from an invalid reactor-water-level-high trip signal during surveillance of channel "B". (JC) [LER 95-007] - Duration hours - 37.7

On 7/12/95, a reactor scram was caused by a Main Turbine trip on low condenser vacuum resulting from failure of an HP condenser expansion joint. (SG) [LER 95-008] - Duration hours 139.9

On 7/30/95, a reactor scram occurred due to failure of a current transformer on 500 kV generator output breaker J5228. (JC) [LER 95-010] - Duration hours 68.4

On 9/17/95, the reactor scrammed at low reactor water level caused by failure of the pump discharge check valve to close following a trip of Reactor Feed Pump Turbine "B" resulting from malfunction of pressure regulating valve PRV-4 in lube oil system. Both "B" and "A" discharge check valves were repaired to prevent a similar occurrence. (SJ) [LER 95-011] - Duration hours 51.5

**MAIN STEAM SAFETY RELIEF VALVE CHALLENGES 1995**

There were no main steam line safety relief valve challenges occurring in 1995.

## **GGNS UNIT 1 ANNUAL REPORT**

### **MAN-REM EXPOSURE - 1995**

This section contains a tabulation of the number of station, utility and other personnel receiving exposures greater than 100 mrem/year and their associated man-rem exposure according to work and job function. Also included is a tabulation of the number of personnel by exposure range.

Grand Gulf Nuclear Station  
P.O. Box 756  
Port Gibson, MS 39150

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LICENSE: NPF-2

Regulatory Guide 1.16 Information  
End of Year Report 1995

Work and Job Function	Number of Personnel > 100 mrem			Total man-rem *		
	Station	Utility	Contractor	Station	Utility	Contractor
<b>ROUTINE OPERATIONS AND SURVEILLANCE</b>						
MAINTENANCE AND CONSTRUCTION	4	0	2	1.090	0.003	0.377
OPERATIONS	1	0	0	1.183	0.000	0.003
HEALTH PHYSICS	28	7	27	13.315	2.209	10.278
SUPERVISORY	1	0	0	0.275	0.000	0.015
ENGINEERING	0	0	0	0.172	0.000	0.000
<b>ROUTINE PLANT MAINTENANCE</b>						
MAINTENANCE AND CONSTRUCTION	157	25	417	70.723	8.093	153.983
OPERATIONS	58	0	11	25.683	0.002	7.547
HEALTH PHYSICS	28	1	8	9.666	0.428	2.793
SUPERVISORY	11	1	17	3.338	0.386	4.177
ENGINEERING	16	0	2	6.192	0.011	0.988
<b>INSERVICE INSPECTION</b>						
MAINTENANCE AND CONSTRUCTION	0	0	64	0.084	0.000	24.246
OPERATIONS	0	0	0	0.000	0.000	0.026
HEALTH PHYSICS	0	0	0	0.018	0.003	0.004
SUPERVISORY	3	0	31	1.094	0.026	9.393
ENGINEERING	2	0	0	0.371	0.001	0.055
<b>SPECIAL PLANT MAINTENANCE</b>						
MAINTENANCE AND CONSTRUCTION	0	0	0	0.000	0.000	0.000
OPERATIONS	0	0	0	0.000	0.000	0.000
HEALTH PHYSICS	0	0	0	0.000	0.000	0.000
SUPERVISORY	0	0	0	0.000	0.000	0.000
ENGINEERING	0	0	0	0.000	0.000	0.000

Regulatory Guide 1.16 Information  
End of Year Report 1995

Work and Job Function	Number of Personnel > 100 mrem			Total man-rem *		
	Station	Utility	Contractor	Station	Utility	Contractor
<b>WASTE PROCESSING</b>						
MAINTENANCE AND CONSTRUCTION	0	0	0	0.000	0.000	0.000
OPERATIONS	0	0	0	0.000	0.000	0.000
HEALTH PHYSICS	0	0	0	0.000	0.000	0.000
SUPERVISORY	0	0	0	0.000	0.000	0.000
ENGINEERING	0	0	0	0.000	0.000	0.000
<b>REFUELING</b>						
MAINTENANCE AND CONSTRUCTION	0	0	38	0.118	0.000	11.142
OPERATIONS	1	0	2	0.453	0.000	0.534
HEALTH PHYSICS	0	0	0	0.022	0.000	0.070
SUPERVISORY	0	0	2	0.347	0.007	0.401
ENGINEERING	0	0	0	0.416	0.000	0.000
<b>Totals</b>						
MAINTENANCE AND CONSTRUCTION	161	25	521	72.015	8.096	189.748
OPERATIONS	60	0	13	27.319	0.002	8.110
HEALTH PHYSICS	56	8	35	23.021	2.640	13.145
SUPERVISORY	15	1	50	5.054	0.419	13.986
ENGINEERING	18	0	2	7.151	0.012	1.043
<b>Grand Totals</b>	<b>310</b>	<b>34</b>	<b>621</b>	<b>134.560</b>	<b>11.169</b>	<b>226.032</b>

\* The total radiation exposure of the above personnel constitutes 100% of the site's exposure for the year.

### **SPECIAL MAINTENANCE ACTIVITIES**

There were no special maintenance activities in 1995 that resulted in exposure greater than 100 mrem.



### **FAILED FUEL INDICATIONS/INSPECTIONS - 1995**

Failed fuel assessments performed during Cycle 8 indicate a single, medium-sized fuel failure exists in the Grand Gulf core.

The failure occurred on 9/9/95. Fuel Reliability Index peaked at 3061 Ci/sec and leveled at about 1000 Ci/sec.

The failure appears to be in a second cycle bundle in core cell location 32-27. This cell contains two second cycle bundles. Current plans are to discharge both of these bundles during RFO8 (October 1996).