

## LICENSEE EVENT REPORT

Attachment to AECM-84/0196

Page 1 of 2

CONTROL BLOCK:

1

PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION

0 1 M S G G S 1 2 0 0 - 0 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5  
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

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0 1 REPORT SOURCE L 6 0 5 0 0 0 4 1 6 7 0 8 3 0 8 3 8 0 3 3 0 8 4 9  
7 8 DOCKET NUMBER 59 60 EVENT DATE 74 75 REPORT DATE 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (16)

0 2 On 8-30-83, during a 24-hour surveillance test run, the Div. I D/G was  
0 3 shutdown when the RB1 and LB5 cylinder exhaust gaskets failed and a  
0 4 crack and 2 broken welds were discovered on the intercoolers. The diesel  
0 5 was 98 minutes into the test run. Per Reg. Guide 1.108, para C.2.e.(3),  
0 6 this was a valid successful test. There was no effect on the health and  
0 7 safety of the public nor was there a threat to plant safety. This is  
0 8 reported pursuant to T.S.4.8.1.1.3. This is a final report.

0 9 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE  
E E 11 B 12 B 13 ENGINE 14 Z 15 Z 16  
17 LER NO. REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.  
8 3 1 3 6 0 3 X 4  
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NRC-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER  
A 18 F 19 Z 20 Z 21 0 0 0 0 Y 23 N 24 A 25 D 0 5 1 5 26

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The gasket failures were caused by loose manifold bolts and have been  
1 1 replaced. A crack in the base metal of the LB intercooler was caused  
1 2 by the turbocharger misalignment and mounting problems reported in  
1 3 LER 83-107. Two broken stay rod welds on the RB intercooler were  
1 4 due to insufficient filler welds. The crack & welds were weld repaired.

1 5 FACILITY STATUS 28 0 0 0 29 NA OTHER STATUS 30 METHOD OF DISCOVERY 31 Operator Observation DISCOVERY DESCRIPTION 32  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 6 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 7 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 8 PERSONNEL INJURIES NUMBER DESCRIPTION 41  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
1 9 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION 43  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
2 0 PUBLICITY ISSUED DESCRIPTION 45  
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

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NRC USE ONLY

NAME OF PREPARER R. W. Byrd

PHONE

SUPPLEMENTARY INFORMATION TO  
LER 83-136/03 X-4

Mississippi Power & Light Company  
Grand Gulf Nuclear Station - Unit 1  
Docket No. 50-416

Technical Specification Involved: 4.8.1.1.3  
Reported Under Technical Specification: 6.9.1.13.b

Event Narrative:

The bolts used to attach the exhaust manifolds to the Diesel Generator exhaust ports were 304 stainless steel, Transamerica Delaval Inc. part number GB-079-118 (item 63, drawing 02-380-06). The bolts were difficult to unscrew and a visual inspection revealed high temperature discoloration. A subsequent review determined that 304 stainless steel is not the best choice for the application. The bolts were replaced with 316 stainless steel until replacement bolts of a type more suitable for this service are obtained.

The crack in the base metal of the LB intercooler was caused by vibration that was induced by the turbocharger misalignment and mounting problems reported in LER 83-107.

The broken stay rod welds on the RB intercooler were caused by insufficient fillet welds. The failures may have been aggravated by the turbocharger bolt problem reported in LER 83-107. The fillet welds were specified in the vendor manual to be 1/4" but were discovered to be less than 1/8". The broken welds resulted in small air leaks at the juncture point between the rods and the intercooler. The welds were removed and the area was weld repaired to specifications.

There was no effect on the health and safety of the public nor was there a threat to plant safety. All Technical Specification action requirements were met. This is reported pursuant to Technical Specification 4.8.1.1.3 and is submitted as a final report.



# MISSISSIPPI POWER & LIGHT COMPANY

*Helping Build Mississippi*

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

March 30, 1984

NUCLEAR PRODUCTION DEPARTMENT

U.S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N.W., Suite 2900  
Atlanta, Georgia 30303

Attention: Mr. J. P. O'Reilly, Regional Administrator

Dear Mr. O'Reilly:

SUBJECT: Grand Gulf Nuclear Station  
Unit 1  
Docket No. 50-416  
License No. NPF-13  
File: 0260/L-835.0  
Update Report - Division 1 Diesel  
Generator Shutdown Due to  
Failure of Exhaust Gaskets on  
RB1 and LB5 Cylinders  
LER 83-136/03 X-4  
AECM-84/0196

This letter submits an update to a previous update report submitted on January 13, 1984. The event for which the report was submitted occurred on August 30, 1983, during a 24 hour surveillance test run. The Division 1 Diesel Generator was shutdown when the right bank number 1 and left bank number 5 cylinder exhaust gaskets failed and a crack and two broken welds were discovered on the intercoolers. The diesel was 98 minutes into the test run. This was considered a valid successful test pursuant to Regulatory Position C.2.e(3) of Regulatory Guide 1.108. This was reported pursuant to Technical Specification 4.8.1.1.3 and 6.9.1.13.b.

Our investigation into the cause is complete. Corrective actions for the above event are complete or are in the process of being completed. This is a final report. Attached is LER 83-136/03 X-4 with Supplementary Information.

Yours truly,

*L. F. Dale*

L. F. Dale  
Manager of Nuclear Services

EBS/SHH:rg  
Attachment

cc: See next page

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