

NRC Form 306  
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/86

## LICENSEE EVENT REPORT (LER)

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

TITLE (4) Containment Airlock Test Flanges Not Leak Rate Tested											
--	--	--	--	--	--	--	--	--	--	--	--

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 N/A			DOCKET NUMBER(S) 0 5 0 0 0		
0 6	2 1	8 5	8 5	0 2 6	0 0	0 8	0 7	8 5				0 5 0 0 0		

OPERATING MODE (9) 1		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)									
POWER LEVEL (10) 0 6 9		20.402(b)		20.408(e)		50.73(a)(2)(iv)		73.71(b)			
		20.406(a)(1)(i)		50.36(e)(1)		50.73(a)(2)(v)		73.71(c)			
		20.406(a)(1)(ii)		50.36(e)(2)		50.73(a)(2)(vi)		OTHER (Specify in Abstract below and in Text, NRC Form 365A)			
		20.406(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)					
		20.406(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)					
		20.406(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)					

LICENSEE CONTACT FOR THIS LER (12)											
NAME Ronald W. Byrd/Licensing Engineer								TELEPHONE NUMBER 6 0 1 4 3 7 - 2 1 4 9			

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC		

SUPPLEMENTAL REPORT EXPECTED (14)								EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)								NO				

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

On June 21, 1985, it was discovered that test port flanges used to perform the airlock overall leakage "Barrel Tests" had not been local leak rate tested. At the time it was uncertain whether testing was required. However, as a precautionary measure, the containment airlock test port flanges were immediately local leak rate tested and no detectable leakage was identified. On June 27, 1985, a subsequent local leak rate test of the drywell test flange identified no detectable leakage. On July 17, 1985, after engineering review, it was concluded that the containment airlock flanges should be local leak rate tested as part of the Type B leak rate test of the containment airlock barrel which is required by 10CFR50 Appendix J and which is delineated in Technical Specification Surveillance Requirement 4.6.1.3. The flanges (one drywell and two containment) had never been leak rate tested since the flanges were not previously considered part of the testable boundary. Based on the above engineering review the condition was determined reportable on July 17, 1985.

The containment airlock blind flanges are located on 3 inch ports in the airlock outer bulkheads and represent a part of the containment boundary whenever the inner airlock door is opened for transit or fails to seal. Likewise, the drywell airlock blind flange represents a part of the drywell temporary pressure retention boundary whenever the inner door is opened for transit or fails to seal.

8508140489 850807  
PDR ADDOCK 05000416  
S PDR

J14AECM85072603 - 3

NRC Form 366A  
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104  
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Grand Gulf Nuclear Station - Unit 1	0 5 0 0 0 4 1 6 85	—	0 2 6	— 0 0	0 2	OF	0 3

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

Description of Occurrence

On June 21, 1985, at 1645 it was discovered that flanges used to perform airlock overall leakage "Barrel Tests" had not been local leak rate tested. The flanges were not designed to be local leak rate tested and had never been tested since LLRT testing of the flanges had previously been determined unnecessary. On July 17, 1985, after engineering review, it was concluded that the flanges should be local leak rate tested as part of the Type B leak rate test of the containment airlock barrel which is required by 10CFR50 Appendix J and which is delineated in Technical Specification Surveillance Requirement 4.6.1.3.

Initial Condition

At the time of discovery the plant was operating at 69 percent power.

Status of Redundant or Backup Components

Not Applicable

Nature of Occurrence

The subject flange is used to cap a 3 inch emergency air supply and test port in the airlock outer bulkhead. These ports are closed (by a blind flange and gasket bolted to the port) during normal plant operations and are opened during performance of the Personnel Airlock Door Seal Pneumatic System Test (required once per 18 months in accordance with Technical specifications 4.6.1.3.d.3 and 4.6.2.3.d.3) and during performance of the Local Leak Rate Tests (LLRTs) on the airlocks (required once per 6 months by Technical Specifications 4.6.1.3.b and 4.6.2.3.b). In addition, the LLRT is required on any airlock prior to establishing primary containment or drywell integrity when maintenance has been performed on that airlock which could affect the airlock sealing capability. Both surveillance procedures require double verification that the test port flange is closed and secured upon test completion which provides a high level of assurance that the flanges are properly in place.

On July 17, 1985, it was concluded that the containment airlock blind flange is a part of the containment boundary when the inner airlock door is opened for transit or fails to seal. Since Technical Specification 3.6.1.3 allows plant operation to continue with one door inoperable and the operable door closed, the test connection flange could represent a boundary for an extended period of time if the inner door was the inoperable component. Therefore, it has been concluded that the flanged connection should be tested as part of the Type B leak rate test of the airlock barrel which is required by 10CFR50 Appendix J and delineated in Technical Specification Surveillance Requirement

J14AECM85072603 - 4

NRC Form 366A  
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104  
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Grand Gulf Nuclear Station - Unit 1	0 5 0 0 0 4 1 6	8 5	0 2 6	0 0	0 3	OF	0 3

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

4.6.1.3. It was also concluded that the discussion above applies to the drywell personnel airlock test connection blind flange since it forms a part of the drywell temporary pressure retention boundary. The Type B test requirements do not apply since the drywell airlock door seals are not part of the containment pressure boundary.

#### Immediate Corrective Actions

The test port flange for each containment airlock was leak rate tested on June 21, 1985, and restored to operability at 2105 when no detectable leakage was identified.

The drywell airlock flange LLRT was not performed until June 27, 1985 following a plant shutdown. Performance at this later date was justified since the Appendix J test requirements do not apply to the drywell on a Mark III containment and reasonable assurance had already been provided that the blind flange had been properly reinstalled on the test port per the existing surveillance requirements. Since Appendix J does not apply to the drywell, the surveillance was not required to include provisions for local leak rate testing of the flange. Further justification for delaying the LLRT for the drywell airlock flange is provided in that both drywell airlock doors had been verified locked and closed prior to the last startup. Since the test port is on the same plane as the outer drywell airlock door, the intent of Technical Specification 3.6.2.3 Action (a) was met by the fact that the inner door had been verified closed and locked prior to the last startup as required by the startup procedure.

#### Apparent Cause

A 1983 review of containment penetrations for 10CFR50 Appendix J compliance incorrectly concluded that testing of the flanges was unnecessary. The condition was discovered during a review of a design change request for a modification of the subject test ports.

#### Supplemental Corrective Action

The test port flanges will be added to the appropriate surveillance procedures prior to the next surveillance due date.

#### Safety Assessment

The containment airlock blind flange is part of the containment boundary only when the inner airlock door is opened for transit or fails to seal. Administrative controls and the results of the subsequent LLRT tests provide assurance that the plant did not operate in a degraded condition. The surveillance procedures which utilize the test port ensure it is closed and secured upon completion of the tests (double verification required). The subsequent LLRT tests revealed no detectable leakage.

J14AECM85072603 - 5



# MISSISSIPPI POWER & LIGHT COMPANY

*Helping Build Mississippi*

P. O. BOX 1640, JACKSON, MISSISSIPPI 39215-1640

August 7, 1985

NUCLEAR LICENSING & SAFETY DEPARTMENT

Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station  
Unit 1  
Docket No. 50-416  
License No. NPF-29  
File: 0260/L-835.0  
Containment Airlock Test Flanges  
Not Leak Rate Tested  
LER 85-026-0  
AECM-85/0234

Attached is Licensee Event Report (LER) 85-026-0 which is a final report.

Yours truly,

*J. H. Hobbs*  
L. F. Dale  
Director

EBS/SHH:dmm  
Attachment

cc: Mr. J. B. Richard (w/a)  
Mr. O. D. Kingsley, Jr. (w/a)  
Mr. R. B. McGehee (w/a)  
Mr. N. S. Reynolds (w/a)  
Mr. H. L. Thomas (w/o)  
Mr. R. C. Butcher (w/a)

Mr. James M. Taylor, Director (w/a)  
Office of Inspection & Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dr. J. Nelson Grace, Regional Administrator (w/a)  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta St., N. W., Suite 2900  
Atlanta, Georgia 30323

*IE22  
1/1*