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May 4, 1990

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

Corrected Copy to Correct Duplicate Number

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Surveillance Procedure Does Not Fully Implement Technical Specification Requirements
LER 90-004
AECM-90/0084

Attached is Licensee Event Report (LER) 90-004 which is a final report.

Yours truly,

WTC:cg
Attachment

cc: Mr. D. C. Hintz (w/a)
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LER90004/SCMPFLR - 1

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NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

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

TITLE (4)
Surveillance Procedure Does Not Fully Implement Tech Spec Requirements

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	DOCKET NUMBER(S)
0 4	0 6	9 0	9 0	0 0 4	0 0	0 5	0 4	9 0	NA	0 5 0 0 0
										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)	1 0 0	20.402(b)	20.405(c)	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 (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		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	TELEPHONE NUMBER
Ronald Byrd/Licensing Engineer	AREA CODE 6 0 1 — 4 3 7 - 2 1 8 2

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 SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On April 6, 1990 plant personnel discovered that the surveillance procedure for verifying air pressure in the containment airlock seal flasks did not fully implement the requirements of Technical Specification 4.6.1.3.d.2. This Technical Specification requires each of the two containment air locks to be demonstrated operable by verifying that seal air flask pressure is greater than or equal to 90 psig at least once per 7 days. Each air lock is equipped with two air flasks connected to a common air supply. Ball check valves are installed between each air flask and the air supply such that the air pressure in one flask may not be indicative of the air pressure in the other flask. The surveillance procedure as written allowed operators to check only one of the two air flasks at each airlock. Upon discovery of the situation, the air pressure in all flasks were checked and confirmed to be greater than or equal to 90 psig.

The deficiency was the result of a procedural change made in 1984. The deficiency was not detected by procedure reviewers. The present surveillance program is considered adequate. Appropriate Operations personnel and plant staff engineers will be made aware of this incident and the importance of detecting and correcting procedural weaknesses.

NRC Form 366A (10-83)

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Grand Gulf Nuclear Station	0 5 0 0 0 4 1 6	9 0	— 0 0 4	— 0 0	0 2	OF 0 4

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

A. Reportable Occurrence

On April 6, 1990, plant personnel discovered that the surveillance procedure for verifying air pressure in the containment airlock seal flasks did not fully implement the requirements of Technical Specification 4.6.1.3.d.2. This situation is reported pursuant to 10CFR50.73(a)(2)(i)(B).

B. Initial Conditions

The plant was operating at approximately 100 percent power at the time of discovery.

C. Description of Occurrence

Technical Specification 4.6.1.3.d.2 requires each of the two containment air locks to be demonstrated operable by verifying that seal air flask pressure is greater than or equal to 90 psig at least once per 7 days. Each containment air lock is equipped with two air flasks which provide a post-accident 30 day air supply to the seals of the airlock doors. The flasks are connected to a common air supply which normally provides 90 to 100 psig of air pressure. Ball check valves are installed between each flask and the common air supply from the instrument air system (EIIS Code: LD)

The surveillance procedure as written, allowed checking the air pressure in only one of the two flasks at each airlock. This method would be adequate for verifying proper air pressure in both flasks provided the check valves are operational in the open function and the supply air pressure is at or above 90 psig. Since the check valves are not checked for the open function, the surveillance procedure is not adequate for verifying that the air pressure is greater than or equal to 90 psig in all flasks.

Upon identification of the deficiency, the air pressures in all flasks were checked and found to be acceptable.

D. Apparent Cause

Prior to April 1984, the surveillance procedure required the air pressure in both seal flasks at each containment air lock to be checked. During that time, each seal flask was equipped with a permanently attached pressure gauge from which the surveillance readings were taken. In 1984, all pressure gauges were removed from the flasks due to concerns involving the ability of the gauges to maintain pressure integrity following a seismic event. After the gauges were removed, the surveillance procedure was revised to require operators to connect a temporary gauge to a flask at each airlock for the pressure reading. The revised procedure provided only one blank for recording the data and did not specify which seal flask was to be checked. The procedure reviewers failed to identify that the surveillance instructions and documentational provisions were not adequate to fully implement the Technical Specification requirements.

E. Supplemental Corrective Actions

The surveillance procedure, 06-OP-1000-W-0001, has been changed to require operators to check air pressure in both seal flasks at each containment air lock.

Technical Specification 4.6.2.3.d.2 similarly requires the drywell airlock to be demonstrated operable by verifying seal air flask pressure to be greater than or equal to 90 psig at least once per 7 days. The instructions for this surveillance correctly required operators to check the pressure in all four air flasks.

A previous situation where a surveillance requirement was not properly implemented into plant directives was reported in LER 87-017. As a result of that occurrence, the Author's Guide procedure was changed to emphasize to procedure preparers and reviewers the importance of reviewing base documents during the preparation and review process. In addition, the preparation and review process for surveillance procedures is judged to be more proficient now than in 1984 due to organizational changes and improved guidance and training in the area of 10CFR50.59 reviews.

Appropriate Operations personnel and plant staff engineers will be made aware of this incident and the importance of detecting and correcting procedural weaknesses. The present surveillance program is considered adequate and no changes to the program are planned as a result of this event.

F. Safety Assessment

Although only one flask at each containment airlock was checked weekly, there is reasonable assurance that all seal flasks were maintained at a pressure greater than or equal to 90 psig. In the unlikely event that a ball check valve stuck closed, so that the air supply to the flask was blocked, the air in the flask would be depleted to less than 60 psig in only two containment ingress/egress cycles. When air pressure in a seal flask dropped below 60 psig, the green seal lights indicating that the door is sealed would not light, thereby alerting operators to the condition. No such conditions resulting from low air pressure have occurred.

It is also noted that containment integrity can be maintained with only one operable air flask for each air lock since each flask supplies air pressure to one seal on the inner air lock door and to one seal on the outer air lock door.