

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) McGuire Nuclear Station - Unit 1										DOCKET NUMBER (2) 0 5 0 0 0 3 6 9				PAGE (3) 1 OF 4										
TITLE (4) Personnel Airlock Integrity not Assured																								
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	3	2	0	8	5	8	5	0	1	0	0	0	4	1	9	8	5	0	5	0	0	0		
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)																						
1		20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(b)										
POWER LEVEL (10)		20.405(a)(1)(i)				50.38(c)(1)				50.73(a)(2)(v)				73.71(c)										
0		20.405(a)(1)(ii)				50.38(c)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)										
6		20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(viii)(A)														
5		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)(ix)														
LICENSEE CONTACT FOR THIS LER (12)																								
NAME Scott Gewehr - Licensing										TELEPHONE NUMBER														
										AREA CODE 7 0 4 3 7 3 - 7 5 8 1														
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																								
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS															
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR										
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO														

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

On March 20, 1985, during performance of the Lower Containment Personnel Lock Leak Rate Test, it was discovered that the keyswitch for the door on the reactor side of the Containment Personnel Airlock was in the "Bypass" position. This created the possibility that both airlock doors could be open at the same time, thereby violating containment integrity. Both doors were verified to be closed and sealed, and containment integrity was not compromised. The cause of the event is attributed to procedural deficiency, because the appropriate procedures did not require a sign-off step to verify that the interlock key switches are in the "active" position when returning the airlock to service.

Corrective Actions will address procedure changes to ensure that interlock key switches are returned to their "active" position prior to entering Mode 4.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)

DOCKET NUMBER (2)

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McGuire Nuclear Station - Unit 1

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TEXT (If more space is required, use additional NRC Form 366A 2) (17)

INTRODUCTION: On March 20, 1985, at approximately 1100, two Performance technicians discovered the interlock keyswitch inside the Unit 1 lower personnel airlock in the "bypass" position. With the keyswitch in this position, it is possible to open the Reactor side airlock door without the Auxiliary side airlock door being shut, thus losing containment integrity.

The discovery was made while performing section 12.8 of PT/1/A/4200/01F, Lower Containment Personnel Lock Leak Rate Test, which is performed pursuant to Technical Specification 4.6.1.3c. The technicians ensured both doors were closed and sealed and informed Control Room personnel of the discovery. Containment integrity was not lost.

Unit 1 was in Mode 1 at 65% power at the time of the discovery.

This incident was caused by an Administrative/Procedural Deficiency because the applicable Operations procedures do not contain sign off steps to verify the airlock interlock keyswitches are in the "active" position when returning the airlock to service, and prior to the unit reaching Mode 4.

EVALUATION: It is a common practice for Operations personnel to white tag both doors open on the upper and lower personnel airlocks if the associated unit is to be in Mode 5 or 6 (with containment integrity not required) for an extended time. Opening and closing both doors is performed using OP/0/A/6700/06; however, this procedure was revised and re-issued in August 1984 with all sign-off lines deleted. With no sign-offs required, the possibility of not fully following the procedure was increased. There were no steps in the unit start-up procedure to verify the airlock interlocks were properly positioned even though the possibility exists of losing containment integrity if an interlock is in the "bypass" position.

During the Unit 1 maintenance outage (11/25/84 through 12/23/84), the lower airlock doors (Reactor side and Auxiliary side) were opened (at the same time) twice with the unit in Mode 5. The first opening occurred on 12/4/84. An

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Operator opened the doors and the seals' air supply valves were white tagged closed per OP/0/A/6700/06. However, he could not remember if he placed either interlock in the bypass position or if both doors were already open. The airlock operation procedure required both interlocks to be in the "bypass" position when both doors are open. (At least one interlock must be in "bypass" position to enable having both doors open.) The Operator who removed the tags and closed the doors on 12/15/84 remembers having problems with the doors operating properly. He thinks he may have left the interlock inside the airlock in the bypass position to prevent anyone from getting stuck inside containment or the airlock.

The lower airlock was again opened on 12/18/84 at 1000. White tags were placed per OP/0/A/6700/06 to keep the doors open. The Operator who opened doors and placed the white tags thinks he remembers the interlock keyswitch inside the airlock being in the "bypass" position, but does not remember the position of the Auxiliary side interlock keyswitch, or if he changed it. Both doors were then closed and the white tags were removed on 12/18/84 at 1300. The Operator who removed the white tags and closed the doors did not know the doors had been tagged open per OP/0/A/6700/06. Operations personnel, who ordered the doors closed, instructed him to remove the white tags and close the doors, but said nothing of the procedure under which the work is done. Therefore, the Operator did as he was instructed and did not reposition or verify the proper position of either airlock interlock keyswitch. The Operator said that sometimes equipment is tagged out using the Removal and Restoration (R&R) procedure, although it was not used this time. This consists primarily of a checklist to record when equipment is removed from service and returned to service.

There is no record of both lower airlock doors being opened simultaneously after 1300 on 12/18/84. Unit 1 entered Mode 4, at 0212, on 12/19/84, after containment integrity was verified. This included having at least one airlock door closed at all times. It is probable that at least one lower airlock

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

interlock keyswitch was still in the bypass position when the unit entered Mode 4. If this were true, both doors could have been opened simultaneously, and containment integrity would have been lost.

Performance personnel did find the interlock inside the lower airlock in the "bypass" position. Since there is no documentation reflecting the positioning and repositioning of either interlock keyswitch, no determination can be made as to when the interlock failed to get changed to the "active" position. However, based on the recollection of the involved Operations personnel and information from the White Tag Log, it is highly probable that the omission to reposition the keyswitch occurred when the airlock was returned to service prior to the unit entering Mode 4 in December 1984. The Operator who closed the doors on 12/18/84 was fully qualified under the existing operations qualification program and had been signed off as having reviewed the Airlock Operation Procedure.

CORRECTIVE ACTION:

A step will be added to OP/1/A/6100/01 and OP/2/A/6100/01, Controlling Procedure For Unit Start-Up, to verify all airlock interlock keyswitches are in the "active" position prior to the unit entering Mode 4.

Independent Verification sign-offs will be added to OP/0/A/6700/06, Personnel Airlock Operations, to ensure interlock keyswitches are returned to the "active" position when both doors are closed.

SAFETY ANALYSIS:

Containment integrity was not lost as a result of this incident. If both doors had been open, the Control Room personnel would have been alerted by the annunciators and taken steps to re-establish containment integrity. The health and safety of the public were unaffected by this incident.

**DUKE POWER COMPANY**

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**HAL B. TUCKER**  
VICE PRESIDENT  
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April 19, 1985

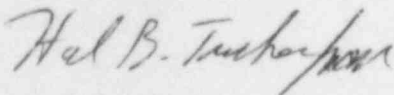
Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Subject: McGuire Nuclear Station, Unit 1  
Docket No. 50-369  
LER 369/85-10

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a)(1) and (d), attached is Licensee Event Report 369/85-10 concerning a Potential for Loss of Containment Integrity which is submitted in accordance with §50.73 (a)(2)(v). This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,



Hal B. Tucker

SAG/mjf

Attachment

cc: Dr. J. Nelson Grace, Regional Administrator  
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