

CONTROL BLOCK: 

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0	1	N	J	S	G	S	1	2	0	0	-	0	0	0	0	0	-	0	0	3	4	1	1	1	1	4			5
7	8	LICENSEE CODE						14	LICENSE NUMBER										25	LICENSE TYPE				30	57 CAT 58				

7 8

REPORT SOURCE

60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

0 1 L 6 0 5 0 0 0 2 7 2 7 0 9 2 6 8 3 8 1 0 2 1 8 3 9

On two separate occasions, on September 26 and October 5, 1983, during routine surveillance, the 100' El. Containment Air Lock failed to meet test requirements. In each case, the air lock was declared inoperable and Action Statement 3.6.1.3 was entered. On both occasions, one air lock door was operable and maintained closed in compliance with action requirements. Repairs were completed and the air lock was restored to operability within the interval required. The event constituted operation in a degraded mode in accordance with Technical Specification 6.9.1.9b.

SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE					
0	9	S	A	A	B	P	E	N	E	T	R	A	Z				
7	8	9	10	11	12	13	14	15	16	17	18	19	20				
LER RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.							
17	8	3	—	0	4	4	/	0	3	L	—	0					
21	22	23	24	25	26	27	28	29	30	31	32						
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	
A	H	Z	Z	0	0	0	Y	N	A	C	3	1	0				
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47			

Investigation revealed in both cases that the test failures may have involved problems with the test methods and equipment. A License Change Request has been submitted to allow lowering the test pressure, and training of personnel conducting the tests will be performed. Training of all station personnel operating the air lock will also be upgraded.

FACILITY STATUS				% POWER				OTHER STATUS				METHOD OF DISCOVERY				DISCOVERY DESCRIPTION			
1	5	E	28	1	0	0	29	N/A				B	31	Surveillance Testing					
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
ACTIVITY CONTENT				RELEASED OF RELEASE				AMOUNT OF ACTIVITY				LOCATION OF RELEASE							
1	6	Z	33	Z	34	N/A				N/A									
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
PERSONNEL EXPOSURES				NUMBER				TYPE				DESCRIPTION							
1	7	0	0	0	37	Z	38	N/A											
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
PERSONNEL INJURIES				NUMBER				DESCRIPTION											
1	8	0	0	0	40	N/A													
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
LOSS OF OR DAMAGE TO FACILITY				TYPE				DESCRIPTION											
1	9	Z	42	N/A															
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
PUBLICITY				ISSUED				DESCRIPTION											
2	0	N	44	N/A															
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		

8311070231 831021  
PDR ADOCK 05000272  
S PDR

NRC USE ONLY

68	69	70	71	72	73	74	75	76	77	78	79	80
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PHONE (609) 935-6000 Ext. 4309

EE 22

CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	N	J	S	G	S	1	2	0	0	-	0	0	0	0	0	-	0	0	3	4	1	1	1	1	4	5
7	8	LICENSEE CODE						14	LICENSE NUMBER										25	LICENSE TYPE				30	57	CAT	58

CON'T

REPORT SOURCE 0 1 7 8 L 6 0 5 0 0 2 7 2 7 0 9 2 6 8 3 8 1 0 2 1 8 3 9  
60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On two separate occasions, on September 26 and October 5, 1983, during routine surveillance, the 100' El. Containment Air Lock failed to meet test requirements. In each case, the air lock was declared inoperable and Action Statement 3.6.1.3 was entered. On both occasions, one air lock door was operable and maintained closed in compliance with action requirements. Repairs were completed and the air lock was restored to operability within the interval required. The event constituted operation in a degraded mode in accordance with Technical Specification 6.9.1.9b.

09		SYSTEM CODE S A		11	CAUSE CODE A		12	CAUSE SUBCODE B		13	COMPONENT CODE P E N E T R				14	COMP. SUBCODE A		15	VALVE SUBCODE Z		16
7	8	9	10		11		12		13		14	15	16	17	18	19	20		21		
17		LER RD REPORT NUMBER		EVENT YEAR 8 3		21	22	SEQUENTIAL REPORT NO. —		23	OCCURRENCE CODE 0 4 4		24	25	REPORT TYPE L		26	27	REVISION NO. 0		28
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		22	ATTACHMENT SUBMITTED		23	NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER		24	
A		H		Z		Z		0 0 0 0		22	Y		23	N		A		C 3 1 0		24	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Investigation revealed in both cases that the test failures may have involved

1 1 problems with the test methods and equipment. A License Change Request has been

1 2 submitted to allow lowering the test pressure, and training of personnel conducting

1 3 the tests will be performed. Training of all station personnel operating the air

1 4 lock will also be upgraded.

FACILITY STATUS			% POWER			OTHER STATUS			METHOD OF DISCOVERY			DISCOVERY DESCRIPTION		
1	5	E	28	1	0	0	29	N/A	30	B	31	Surveillance Testing		
7	8	9	10	11	12	13	14	15	16	17	18	19	20	
ACTIVITY CONTENT			RELEASED OF RELEASE			AMOUNT OF ACTIVITY			LOCATION OF RELEASE					
1	6	Z	33	Z	34	N/A			35	N/A			36	
7	8	9	10	11	12	13	14	15	16	17	18	19	20	
PERSONNEL EXPOSURES			NUMBER			TYPE			DESCRIPTION					
1	7	0	0	0	37	Z	38	N/A			39			
7	8	9	10	11	12	13	14	15	16	17	18	19	20	
PERSONNEL INJURIES			NUMBER			DESCRIPTION								
1	8	0	0	0	40	N/A			41					
7	8	9	10	11	12	13	14	15	16	17	18	19	20	
LOSS OF OR DAMAGE TO FACILITY			TYPE			DESCRIPTION								
1	9	Z	42	N/A			43							
7	8	9	10	11	12	13	14	15	16	17	18	19	20	
PUBLICITY			ISSUED			DESCRIPTION								
2	0	N	44	N/A			45							
7	8	9	10	11	12	13	14	15	16	17	18	19	20	

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PDR ADOCK 05000272  
S PDR

NRC USE ONLY

68 69

NAME OF PREPARER

R. Frahm

PHONE

(609) 935-6000 Ext. 4309

TE 22

Report Number: 83-044/03L

Report Date: 10-21-83

Occurrence Dates: 09-26-83  
10-05-83

Facility: Salem Generating Station Unit 1  
Public Service Electric & Gas Company  
Hancock's Bridge, New Jersey 08038

#### IDENTIFICATION OF OCCURRENCE:

Containment Systems - 100' El. Containment Air Lock - Inoperable.

This report was initiated by Incident Reports 83-177 and 83-180.

#### CONDITIONS PRIOR TO OCCURRENCE:

09-26-83 - Mode 1 - Rx Power 100 % - Unit Load 1124 MWe.

10-05-83 - Mode 1 - Rx Power 100 % - Unit Load 1130 MWe.

#### DESCRIPTION OF OCCURRENCE:

On two separate occasions, on September 26 and October 5, 1983, during routine surveillance testing of the containment air locks, the 100' El. Containment Air Lock failed to meet testing requirements. In the first instance, at 0445 hours, September 26, 1983, surveillance testing revealed excessive leakage past the seals of the outer door of the air lock. It was accordingly declared inoperable and Technical Specification Action Statement 3.6.1.3 was entered. Although no problems were evident, the door seals were replaced. Subsequent retesting of the air lock was satisfactory, and the action statement was terminated.

At 1830 hours, October 5, 1983, during performance of the door seal surveillance, the Equipment Operator noticed that the test air pressure to the inner door seal was less than the 47 PSIG required by the test. The air lock was declared inoperable and the action statement entered a second time. Investigation revealed that the air pressure was in fact sufficient, and testing of the air lock was satisfactory. The action statement was terminated the next day following further testing which was also satisfactory.

In both cases, the doors were closed and tagged as appropriate, and one operable door was maintained closed to provide containment integrity. Repairs were completed and the affected air lock was restored to an operable status within the time interval specified by the action requirements.

#### APPARENT CAUSE OF OCCURRENCE:

Problems with seal leakage have been previously noted and are apparently due to improper operation of the air lock. Swinging the door too rapidly results in the knife edges striking the seals, moving them out of proper position. The resulting uneven seating of the knife edges causes the seals to exhibit excessive leakage during

APPARENT CAUSE OF OCCURRENCE: (cont'd)

subsequent testing. Testing with 47 psig (as presently performed) does not closely simulate actual seal performance; a License Change Request has been submitted to lower the pressure to a more reasonable value. In either case, although the air lock door failed to meet the existing test requirements, it would likely have provided a barrier during accident conditions.

A review has recently been conducted to more clearly identify department responsibilities for operation and testing of the air locks, and appropriate changes have been made to administrative and procedural controls (see LER 83-035/03L). Some of the recent problems can reasonably be associated with these changes.

ANALYSIS OF OCCURRENCE:

The limitations on closure for the containment air locks are required to meet the restrictions on containment integrity and containment leak rate. Surveillance testing of air lock seals provide assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests.

Action Statement 3.6.1.3 requires:

With an air lock inoperable, restore the air lock to operable status within 24 hours or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.

As noted, in each case, the air lock was returned to an operable status in a timely fashion, and one door was maintained operable at all times. No undue risk to the health or safety of the public was therefore involved in the occurrences. The events constituted operation in a degraded mode permitted by a limiting condition for operation, and are reportable in accordance with Technical Specification 6.9.1.9b.

CORRECTIVE ACTION:

As noted, in the first instance, the seals on the 100 ft. El. Air Lock outer door were replaced. At 1234 hours, September 26, 1983, the air lock was retested with both doors exhibiting satisfactory leakage rates. The air lock was declared operable, and Action Statement 3.6.1.3 was terminated. In the second instance, as mentioned, the 100' El. Air Lock was satisfactorily retested with no corrective action, and the action statement was terminated at 0430 hours, October 6, 1983.

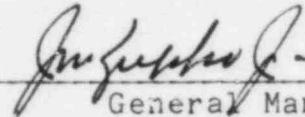
As stated, a review has been conducted to more clearly identify department responsibilities for operation and testing of the air locks, and appropriate changes made to administrative and procedural controls. To reinforce implementation of the changes, further training of operations personnel performing door seal surveillance will be conducted. Finally, as identified in LER 83-035, existing

training of radiation workers in air lock operation will be reinforced. A video tape on the subject is under development, and includes emphasis on the design function and proper use of the air lock equipment.

FAILURE DATA:

Chicago Bridge and Iron Co.  
Personnel Air Lock  
Door Seal

Prepared By R. Frahm



General Manager -  
Salem Operations

SORC Meeting No. 83-129





Public Service Electric and Gas Company P.O. Box E Hancocks Bridge, New Jersey 08038

Salem Generating Station

October 21, 1983

Dr. Thomas E. Murley  
Regional Administrator  
USNRC  
Region 1  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Dear Dr. Murley:

LICENSE NO. DPR-70  
DOCKET NO. 50-272  
REPORTABLE OCCURRENCE 83-044/03L

Pursuant to the requirements of Salem Generating Station Unit No. 1, Technical Specifications, Section 6.9.1.9.b, we are submitting Licensee Event Report for Reportable Occurrence 83-044/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "J. M. Zupko, Jr.", written in a cursive style.

J. M. Zupko, Jr.  
General Manager -  
Salem Operations

RF:k11 *gkf*

CC: Distribution