

JUN 1 5 2001 LRN-01 – 0196

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

Gentlemen:

LER 272/01-005-00 SALEM GENERATING STATION - UNIT 1 FACILITY OPERATING LICENSE NO. DPR-70 DOCKET NO. 50-272

Gentlemen:

This Licensee Event Report entitled "Control Room Emergency Air Intake Dampers Inoperable During Spent Fuel Pool Moves" is being submitted pursuant to the requirements of the Code of Federal Regulations 10CFR50.73(a)(2)(i)(B). The attached LER contains no commitments.

Sincerel

D. F. Garchow Vice President -Operations

Attachment

/MGM

C Distribution LER File 3.7

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NRC FORM 366 (1-2001) U.S. NUCLEAR REGULATORY COMMISSION LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)												and fed back to Branch (T-6 E6), nternet e-mail to Affairs, NEOB- If a means used number, the NRC				
FACILITY NAME (1) SALEM GENERATING STATION-UNIT 1					DOCKET NUMBER (2) 05000272				PAGE (3) 1 OF 4							
TITLE (4) Control Roe	om Eme	rgency	/ Air Ir	itake Dampe	ers	Inope	rable	During \$	Spe	ent Fuel Po	ol Mov	es				
EVENT	f DATE (5)		L	ER NUMBER (6)		RE	PORT D	ATE (7)		O	HER FAC	CILI	TIES INVO	OLVED (8)		
MO DAY YEAR			YEAR SEQUENTIAL REV NUMBER NO MO			мо	DAY	YEAR		ACILITY NAME			DOCKET NUMBER			
04	18	01	01 - 005 - 00			06	15	01	FACILITY NAME SALEM UNIT 2		DOCKET NUMBER 05000311					
OPERAT	ING	6		THIS REPORT	I <u>S SU</u> T				HE			<u>CFR</u>				
MODE				20.2201(b) 20.2201(d) 20.2203(a)(1) 20.2203(a)(2)(i) 20.2203(a)(2)(ii)			20.2203(a)(3)(ii) 20.2203(a)(4) 50.36(c)(1)(i)(A) 50.36(c)(1)(ii)(A) 50.36(c)(2)			50.73(a)(2)(ii)(B)		50.73(a)(2)(ix)(A)				
POWE LEVEL		0	┝──├ ───								50.73(a)(2)(iii)		50.73(a)(2)(x)			
	(10)	L				`			1 1	50.73(a)(2)(iv)(A) 50.73(a)(2)(v)(A)		73.71(a)(4) 73.71(a)(5)				
						·····				50.73(a)(2)(v)				OTHER		
				20.2203(a)(2)(ii)		50.46(a)(3)(ii)			50.73(a)(2)(v)		ł		Specify in Abstract belo NRC Form 366A			
				2203(a)(2)(iii) 2203(a)(2)(iv)	-		a)(2)(i)(4	4)		50.73(a)(2)(v)				111 900/1		
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				2203(a)(2)(1) 2203(a)(3)(i)	+	1	a)(2)(ii)(50.73(a)(2)(vi						
				LIC	ENSI			FOR THIS				CERCISIS				
NAME	Michael	G. Mosi	er, Sen	ior Licensing	Eng	gineer			TE	LEPHONE NUM	BER (Inclu	de A	rea Code)	(856) 33	9-5434	
	COM	PLETE	ONE L	INE FOR EAC	СН С	COMPO	ONENI	FAILUF	E I	DESCRIBED	IN THI	S R	EPORT	(13)		
CAUSE			MPON NT	MANU- FACTURER		PORTA LE O EPIX		CAUSE		SYSTEM	COMP N		E	ANU- FA URER	REPORTAB LE TO EPIX	
				EPORT EXP		ED (14				EXPEC		Ρ		DAY	YEAR	
YES (If DATE).	yes, com	olete EX	PECTE	D SUBMISSI	N		XI	NO		SUBMISS DATE (
On April 18, outside eme again at 140 Specification emergency	2001 th orgency a 9 fuel m n 3.7.6.1 air condi	e B 125 air cond oves of action tioning	5 VDC litionin ccurre f (moc air inta	approximately battery disco g air intake. d in the Sale es 5 and 6) ake duct inop affected due	nne No m U requ era	ects we isolati nit 1 s uires th ble, im	ere op on dar pent fi nat wit	en rende mpers we uel pool. h one or ately sus	erin ere Th bot per	g inoperable secured clo ne required th series iso nd CORE A	osed at actions plation of LTERA	thi: we dan TIC	s time a ere miss nper(s) DNS and	and at 1 sed. Te on an c d move	400 and echnical outside ment of	

This condition was caused by weakness in the understanding, by all individuals' involved (licensed operators, outage control center), of all requirements for operability versus availability of the Control Area Ventilation (CAV) system. This was compounded by the recent installation of battery disconnect switches and accompanying procedure changes. Appropriate Operations and Maintenance procedures will be revised to provide clarification on CAV operability

requirements associated with use of the battery disconnect switches. A root cause analysis was performed which was associated with defense in depth for station power. This analysis provides additional Corrective Actions, which would

This condition is being reported in accordance with the requirements of 10CFR50.73(a)(2)(i)(B) as "Any operation or

condition that was prohibited by the plant's Technical Specifications..."

have assisted to preclude the occurrence of a similar event.

NRC FORM 366 (1-2001)

position.

NRC FORM 366A	U.S. NUCLEAR REGULATORY COMMISSION							
(6-1998)	LICENSEE EVEN	F REPORT (LER	.)					
	TEXT CONT	INUATION	- 	<u> </u>				
	FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER	NUMB	ER (6)		PAGE	(3)
				EQUENT		EVISION		<u></u>
		0.5000000				IUMBER	0.05	
SALEM G	BENERATING STATION-UNIT 1	05000272	01 0	0	5	00	2 OF	4
TEXT (If more	space is required, use additional copies of	of NRC Form 3	66A) (17)					
PLANT AND	SYSTEM IDENTIFICATION							
Westinghous	e – Pressurized Water Reactor							
	n Emergency Air Conditioning System (0 stem (batteries, battery chargers, busses							
* Energy Indi (SS/CCC)	ustry Identification System {EIIS} codes a	and component	t function id	lentifie	er cod	les app	bear as	
CONDITION	S PRIOR TO OCCURRENCE							
	was in Mode 6, refueling, at the time of was in Mode 1, power operation at the t		nt.					
No structures event.	s, systems, or components were inopera	ble at the time	of the occu	rrenc	e that	contril	buted to	the
DESCRIPTIC	ON OF OCCURRENCE							
Unit1 Contro Technical Sp during core a 1 are powered powered by t disconnect (I disconnect o	2001 at 1400, and then again at 1409, full Room Emergency Air Conditioning Sys pecification 3.7.6.1 action f (modes 5 and alterations and movement of irradiated full ed from the 1B and 1C 125 VDC busses. the battery charger. However, it was not EJ/DISC) being open to support mainten pen, emergency intake dampers, althoug bsed), were not Technical Specification C	tem (CREACS) 6), requires the el assemblies. The Unit 1 CF OPERABLE d ance on the 1B gh available to) was availa e CREACS The CREA REACS was ue to the 11 battery (E- support Un	able, b be O ACS In avai B 125 J/BTF it 2 (d	but no PERA ntake lable VDC VDC RY). V	t OPE BLE in Damp with the batter Vith the ers wou	RABLE. n all mod ers for L e DC bu y e 1B bat uld have	des Jnit Is Itery
	OF OCCURRENCE							
The intake d	ampers on the outside emergency air-co	nditioning duct	are powere	ed fro	m the	1B an	d 1C 12	5

The intake dampers on the outside emergency air-conditioning duct are powered from the 1B and 1C 125 VDC busses. With the 1B battery disconnect open, the intake dampers should have been declared inoperable and actions initiated to place at least one isolation damper in the closed position, prior to allowing fuel movement in the Spent Fuel Building. The required Technical Specification was not entered; therefore compensatory actions required by Technical Specifications were not performed.

The CREACS was inoperable due to the 1B battery disconnect being open. The CREACS would have functioned to place the Control Room in the Accident Pressurized Mode. As a result, this event did not pose any nuclear or radiological safety impact.

NRC FORM 366A	U.S. NUCLEAR REGULATORY COMMISSION									
(6-1998) LICENSEE EVENT REPORT (LER) TEXT CONTINUATION										
	FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)					PAGE (3)		
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SALEM C	GENERATING STATION-UNIT 1	05000272	01	0 0	5	00	3	OF	4	

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

ANALYSIS OF OCCURRENCE (continued)

Operation of the disconnect switches allows maintenance to be performed on the respective battery, while maintaining the 125 VDC bus energized via the 125 VDC battery charger (EJ/BYC).

Procedure changes to the respective 125 VDC Bus Operation procedures were incorporated to direct operation of the battery disconnect switches, however, additional procedure changes are required to provide the necessary guidance to preclude recurrence of events similar to this event.

CAUSE OF OCCURRENCE

This condition was caused by weakness in the understanding, by all individuals' involved (licensed operators, outage control center), of all requirements for operability versus availability of the Control Area Ventilation (CAV) system. This was compounded by the recent installation of battery disconnect switches and accompanying procedure changes. While Precaution and Limitation 3.4 of S1(2).OP-IO.ZZ-0010(Q), Spent Fuel Pool Manipulations, indicates control room emergency air conditioning system (CREACS) shall be operable as defined by TS 3.7.6.1action f (modes 5 and 6), the recent addition of 125 VDC battery disconnect switches warrants additional procedure changes to provide clarification on operability requirements. These changes will be incorporated in to the appropriate Operations and Maintenance procedures. A root cause analysis was performed which was associated with defense in depth for station power. This analysis provides additional Corrective Actions that would have assisted to preclude the occurrence of a similar event.

PRIOR SIMILAR OCCURRENCES

A review of LERs from 1998 through the present for both Salem and Hope Creek identified no similar occurrences.

SAFETY CONSEQUENCES AND IMPLICATIONS

There were no safety consequences or implications associated with this event. The dampers were closed and would remain closed on loss of power from the battery. Although inoperable, should a fuel handling accident have occurred at Unit 1 the dampers on the Unit 2 side would have opened placing the Unit 1 control room in the accident pressurized mode. Similarly, if Unit 2 had a loss of coolant accident coincident with loss of offsite power, these dampers would have opened since power was available from the battery charger.

A review of this event determined that a Safety System Functional Failure (SSFF) as defined in NEI 99-02 did not occur.

NRC FORM 366A	U.S. NUCLEAR REGULATORY COMMISSI	ON							
(6-1998)		ENT REPORT (LER) INTINUATION)						
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TEXT // mono en aco io	required use additional conics of NPC Form 3664) (1	7)							
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CORRECTIV	EACTIONS								
1. Appropria regardinç	ate Operations and Maintenance proc operation of the battery disconnect	cedures will be rev switches with rega	ised to rd to C	prov AV c	ide a pera	addi bilit	tional gu y/availal	uidance bility.	
	ning Review Group will evaluate the r el on CAV availability versus operabili		training	g of (Opera	atio	ns Depa	irtment	
COMMITMEN	NTS								
The corrective	e actions cited in this LER are volunt	ary enhancements	and do	o not	cons	stitu	te comn	nitments	-