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LICENSEE EVENT REPORT (LER)

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

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Aut	omati	ic Is	01a	tion	n of Rea	ctor Bu	ildir	ng Ver	ntilat	ion Du	iring Sur	veillance	Testing	3
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ABSTRA	CT (Limit	to 1400 s	Decei.	* *pp/	oximetery fifteer	simple space to	Dewritten	unes/ (16)						
1.1	Dur	ing t	the	Unit	2 1988	refuel	/mair	ntenar	ice out	tage;	with the	reactor	defueled	and
	no	fuel	mov	emer	nt in pr	ogress,	at i	1540 E	nours d	on 2/2	4/88, the	e unit St	andby Ga	IS
100	Tre	atmer	it (SBGI	() Syste	m train	is 24	and 2	2B auto	o-star	ted and	the React	or Build	ing
	Ven	tilat	ior	Sys	stem aut	o-isola	ited.	This	s occus	rred d	uring the	e mainten	ance	
	sur	veill	lanc	e te	est (MST) of th	le Sec	condar	ry Gont	tainme	nt Isola	tion Syst	em (SCIS)
	rad	iatic	on n	onit	oring s	ystem,	2MST-	SCIS2	21R .	The sa	fety sign	nificance	of this	
	eve	nt wa	as c	leter	mined t	o be mi	nimal							
	Thi	s eve	ent	rest	lted fr	om a bi	own r	ower	suppl	/ fuse	(F), FU	4. in the	SPGT	
	Div	ision	i I	trou	ible/sta	rt rela	y los	gic ci	ircuit	ry. T	he blowing	ng of FU4	is	
	att	ribut	ed	10 8	accident	al shor	ting.	, by a	a perso	on or	persons	unknown.	of test	
	equ	ipmer	nt 1	eads	utiliz	ed for	the s	subjec	t MST					

At 1915 hours on 2/24/88, the blown fuse was repla ed and the affected systems were returned to their normal status. Appropriate personnel were counseled concerning this event. By 4/15/88, this event will be covered during Maintenance real-time training.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROV	ED	OMB	NO.	31	50	-01
EXPIRES	8/	31/88				

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)	PAGE (3)	
Brunswick Steam Electric Plant		VEAR SEQUENTIAL REVISION NUMBER NUMBER		
Unit 2	0 5 0 0 0 3 2 4	818 - 01014 - 010	012 OF 01	

Initial Conditions

IRC Form 384A

The Unit 2 1938 refueling/maintenance outage was ongoing with the reactor (EIIS/AC) defueled and the reactor cavity flooded and no fuel movement in progress. The refuel (R) periodicity channel calibration and functional (operability) test of the unit Reactor Building Ventilation System exhaust radiation monitoring (D12) instrumentation (EIIS/IL/MON) was in progress in accordance with the maintenance surveillance test (MST) of the Secondary Containment Isolation System (SCIS) radiation monitoring system (EIIS/IL), 2MST-SCIS21R. Involved technicians were performing Step 7.5.86 of the procedure for calibration of temperature switch (TS) D12-TS-N010B (EIIS/IL/TS), located in the Reactor Building ventilation exhaust room (EIIS/VA/*) on the 80-foot elevation of the building.

Event Description

At 1540 hours on February 24, 1988, the Standby Gas Treatment (SBGT) System trains 2A and 2B (EIIS/BH/FLT) automatically started and the Reactor Building Ventilation System (EIIS/VA) automatically isolated. The Unit 2 Control Operator (CO) was made aware of this event through Control Room indication (EIIS/IO/ZI) and alarm annunciation (EIIS/IB/ANN). Shortly thereafter, technicians involved with the subject MST were questioned to ascertain the anticipated effects of the MST activities with respect to the event.

Event Investigation

It was determined the event resulted from a blown fuse (F), FU4, BUSS Type BAF6, in the SBGT System Division I trouble/start relay logic circuit (EIIS/BH/RLY). In accordance with Step 7.4.99 of the MST procedure, a digital voltmeter (DVM) was connected across the logic circuit terminals CC -84 and CC-85 (EIIS/BH/*) of the circuit protected by fuse FU4. These terminals are in 120 volt (V) alternating current (ac) distribution panel XU-27 (EIIS/EF/PL), located in the Unit 2 Control Room back panels area. The investigation found the DVM test leads were properly connected to the subject circuit terminals and the respective connector pins of the test leads were correctly inserted into the meter; however, evidence of electrical arcing on the meter connector pins was noted.

At the time of the event, other outage-related activities involving use of test equipment and electrical leads were in progress directly across the Control Room back panel isle from panel XU-27. In addition, some of these activities involved cleanup where scrap materials were being picked or swept up. During performance of Step 7.5.86 of the procedure, the Control Room

*EIIS component description unavailable.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

EXPIRES: 8/31/88

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Unit 2	0 5 0 0 0 3 2 4	8 8 - 0 0 4 - 0 0 0	0 3 OF 0 3	

TEXT (If more space is required, use additional NRC Form 385A's/(17)

VIC Form 388A

technician involved with performance of the subject MST left the immediate vicinity of panel XU-27 unattended for approximately ten minutes to observe other ongoing outage activities in adjacent areas.

Following this event, personnel involved with the activities immediately across from panel XU-27 were questioned concerning accidental bumping or pulling of the subject DVM test leads which may have resulted in electrical shorting of the meter leads' connector pins. This questioning failed to identify a cause or method by which shorting of the leads took place.

Investigation Summary

The investigation determined fuse FU4 blew due to electrical shorting of the DVM test lead connector pins. The shorting of the lead connector pins is attributed to accidental pulling or bumping of the leads by a person or persons unknown during the other described activities in progress at the time of the event.

Corrective Actions

At 1915 hours on February 24, 1988, the blown fuse was replaced and the SBGT System was returned to standby readiness and the Reactor Building Ventilation System was returned to normal service.

Technicians involved with performance with the subject MST were counseled to ensure their awareness of the importance of continuous control of test equipment installations and other circuitry changes during testing or investigative evolutions.

By April 15, 1988, the circumstances and conclusions relative to this event will be discussed with appropriate Maintenance personnel during Maintenance real-time training sessions.

Event Assessment

The safety significance of this event is minimal in that the unit was defueled with no fuel handling in progress. This event would not have been more severe under other reasonable and credible alternative conditions.

A review of documentation shows this event to be an isolated occurrence.



Carolina Power & Light Company

Brunswick Steam Electric Plant P. O. Box 10429 Southport, NC 28461-0429

March 24, 1988

FILE: B09-13510C SERIAL: BSEP/88-0302

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

> BRUNSWICK STEAM ELECTRIC PLANT UNIT 2 DOCKET NO. 50-324 LICENSE NO. DPR-62 LICENSEE EVENT REPORT 2-88-004

Gentlemen:

In accordance with Title 10 to the Code of Federal Regulations, the enclosed Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is in accordance with the format set forth in NUREG-1022, September 1983.

Very truly yours,

clut

C. R. Dietz, General Manager Brunswick Steam Electric Plant

MJP/bvc

Enclosure

cc: Dr. J. N. Grace Mr. E. D. Sylvester BSEP NRC Resident Office

10CFR50.73