

## LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	N	C	B	E	P	2	2	0	0	-	0	0	0	0	0	0	0	0	3	4	1	1	1	1	4		5							
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35							
LICENSEE CODE														LICENSE NUMBER										LICENSE TYPE										CAT 58	

CON'T

0	1	L	6	0	5	0	1	-	0	3	2	4	7	0	7	0	9	8	3	8	0	8	3	0	8	3	9				
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35			
REPORT SOURCE		DOCKET NUMBER										EVENT DATE										REPORT DATE									

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

During PT-12.1.1, diesel generator No. 1 tripped on generator reverse power at 1949.

At 2012, while diesel generator No. 1 was already tripped, diesel generator No. 2 tripped on generator reverse power. At 2230, during PT-12.2b, it was determined diesel generator No. 2 was inoperable because the diesel generator service water outlet valve, 1-SW-V207, could not be opened. These events did not affect the health and safety of the public. At the time of these events, Unit No. 2 was at power and Unit No. 1 was in shutdown. Technical Specifications 3.8.1.1, 6.9.1.9b

0	9	E	E	11	E	12	E	13	I	N	S	T	R	U	14	C	15	Z	16	17	8	3	0	6	4	0	3	L	0	0	0	0	Y	Y	N	A	1	6	0														
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47													
LER/RO REPORT NUMBER		EVENT YEAR		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE								COMP. SUBCODE		VALVE SUBCODE		SEQUENCE REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.		ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER									
18		21		11		12		13								15		16		24		25		30		32		33		34		35		36		37		40		41		42		43		44		45		46		47	

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

Sticking contacts in the JATR relay of diesel generator No. 1 caused the diesel generator to trip on fuel cutoff. Diesel generator No. 2 tripped because electrical bus E-2 was paralleled to feeder bus 1C while the diesel was in the "Auto" control. A failed stem bearing in 1-SW-V207 prevented it from opening. The JATR relay was repaired, diesel generator No. 2 was reset, the V207 stem bearing was replaced, and each affected diesel generator was returned to service.

1	5	E	28	0	8	9	29	NA	A	31	Operational Event	32	1	6	Z	33	Z	34	NA	NA	35	NA	36	1	7	0	0	0	37	Z	38	NA	39	1	8	0	0	0	40	NA	41	1	9	Z	42	NA	43	2	0	N	44	NA	45	NA	46	47	48	49	50
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																
FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION		ACTIVITY RELEASED		CONTENT OF RELEASE		AMOUNT OF ACTIVITY		LOCATION OF RELEASE		PERSONNEL EXPOSURES		PERSONNEL INJURIES		LOSS OF OR DAMAGE TO FACILITY		PUBLICATION		ISSUED		DESCRIPTION		NAME OF PREPARER		PHONE		NRC USE ONLY																									
28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50															

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PDR ADCK 05000324  
S PDR

IE 22

NAME OF PREPARER M. J. Pastva, Jr.

PHONE: 919-457-9521

LER ATTACHMENT - RO #2-83-64

Facility: BSEP Unit No. 2

Event Date: July 9, 1983

At 1949 on July 9, 1983, during the performance of diesel generator actual loading test (simulated loss of off-site power concurrent with an ECCS test signal), PT-12.1.1, diesel generator No. 1 tripped on generator reverse power. At 2012 on July 9, 1983, while diesel generator No. 1 was still tripped and unavailable, diesel generator No. 2 tripped on generator reverse power. At 2230 while performing diesel generator monthly load test, PT-12.2b, in order to verify the operability of diesel generator No. 2, it was discovered that the diesel jacket water cooler service water outlet valve, 1-SW-V207, was closed and could not be opened, thereby rendering diesel generator No. 2 inoperable. At the time of these events, Unit No. 1 was in a refueling outage and Unit No. 2 was at power operation.

The first event occurred as a result of sticking relay contacts in the jet assist time relay (JATR) of the diesel starting air system. Due to the sticking contacts, the JATR had remained picked up beyond the required actuation period of four seconds, thereby allowing the diesel starting air to be vented from the diesel starting air receivers. As a result, the diesel fuel stop cylinder then actuated and closed off the diesel fuel supply on loss of control air, causing the loaded diesel to stop and coast down to where the generator reverse power setpoint was reached, at which time the diesel trip and lockout occurred. The pneumatic timing unit of the JATR, Allen Bradley Model No. 700-NT, was replaced and the diesel was then tested and returned to service.

The second event resulted from paralleling plant emergency bus E-2 to its corresponding feeder bus 1C while diesel generator No. 2 was loaded and supplying the E-2 bus and controlled from the RTGB in "Auto." This occurred due to personnel error where the wrong section of the operating procedure was utilized while preparing to secure diesel generator No. 2 from service following the completion of PT-12.1.1. The generator reverse power lockout trip was reset and diesel generator No. 2 was satisfactorily tested for operability and returned to service.

The third event occurred due to a failed valve stem bearing in the 1-SW-V207 where the bearing had separated from its race on the valve stem and allowed the stem to separate from the valve, thereby preventing the valve from being opened. A new stem bearing was installed and the valve, Fisher Valve Co. Model No. 9170, was returned to service. Diesel generator No. 2 was then satisfactorily tested for operability and returned to service.

LER ATTACHMENT - RO #2-83-64  
(Cont'd)

Due to the loss of the emergency power source during these events, the following components were declared inoperable while the diesel generators were inoperable:

Diesel Generator No. 1

1C & 2C RHR pumps (T/S 3.5.3.2)  
1A core spray pump (T/S 3.5.3.1)  
1C & 2C RHR service water pumps  
(T/S 3.7.1.1)  
No. 1 diesel generator  
(T/S 3.8.1.1)  
1A SLC pump (T/S 3.1.5)  
1A SBT (T/S 3.6.6)

Diesel Generator No. 2

1D & 2D RHR pumps (T/S 3.5.2.3)  
1B core spray pump (T/S 3.5.2.1)  
1D & 2D RHR service water pumps  
(T/S 3.7.1.1)  
No. 2 diesel generator  
(T/S 3.8.1.1)  
1B SLC pump (T/S 3.1.5)  
1B SBT (T/S 3.6.6)



Carolina Power & Light Company

USNRC REGION II  
ATLANTA, GEORGIA

83 SEP 6 48:55

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

August 30, 1983

FILE: B09-13510C  
SERIAL: BSEP/83-2906

Mr. James P. O'Reilly, Administrator  
U. S. Nuclear Regulatory Commission  
Region II, Suite 3100  
101 Marietta Street N.W.  
Atlanta, GA 30303

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-324  
LICENSE NO. DPR-62  
LICENSEE EVENT REPORT 2-83-64

Dear Mr. O'Reilly:

In accordance with Section 6.9.1.9b of the Technical Specifications for Brunswick Steam Electric Plant, Unit No. 2, the enclosed Licensee Event Report is submitted. This report was originally due to the Commission on August 8, 1983; however, in a letter dated August 8, 1983, Serial No. BSEP/83-2600, it was reported that this event would be reported by August 31, 1983. This report is in accordance with the format set forth in NUREG-0161, July 1977.

Very truly yours,

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

RMP/pms/LETJH1

Enclosure

cc: Mr. R. C. DeYoung  
NRC Document Control Desk

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