

## LICENSEE EVENT REPORT

CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 N C B E P 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5  
 7 8 9 14 15 25 26 30 57 CAT 58

CON'T  
 0 1 REPORT SOURCE L 6 0 5 0 - 0 3 2 4 7 1 2 1 2 8 3 8 1 2 2 2 8 3 9  
 7 8 60 61 68 69 74 75 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During the performance of testing required by IE Bulletin 83-02, it was determined that crack indications  
 0 3 existed in 19 of 131 welds examined on the Reactor Recirculation System and Reactor Water Cleanup and  
 0 4 Residual Heat Removal System. Data evaluation has determined these indications range from 5 to 22.0  
 0 5 percent of pipe wall thickness with lengths that range from .5" to 11.0". This event did not affect  
 0 6 the health and safety of the public.  
 0 7  
 0 8 Technical Specifications 6.9.1.8c  
 7 8 9 80

0 9 SYSTEM CODE C B 11 CAUSE CODE E 12 CAUSE SUBCODE X 13 COMPONENT CODE P I P E X X 14 COMP. SUBCODE E 15 VALVE SUBCODE Z 16  
 7 8 9 10 11 12 13 14 15 16 17 18 19 20  
 17 LER/RO REPORT NUMBER 8 3 21 22 23 24 25 26 27 28 29 30 31 32  
 ACTION TAKEN X 18 FUTURE ACTION X 19 EFFECT ON PLANT Z 20 SHUTDOWN METHOD Z 21 HOURS 0 0 0 0 22 ATTACHMENT SUBMITTED Y 23 NPRD-4 FORM SUB. Y 24 PRIME COMP. SUPPLIER A 25 COMPONENT MANUFACTURER A 5 1 0 26  
 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The indications are attributed to IGSCC. Eight welds with these indications were repaired using  
 1 1 acceptable weld overlay techniques. The remaining weld indications were evaluated and determined to  
 1 2 be acceptable for startup and continued operation until April 30, 1984.  
 1 3  
 1 4  
 7 8 9 80

1 5 FACILITY STATUS H 28 % POWER 0 0 0 29 OTHER STATUS NA 30 METHOD OF DISCOVERY C 31 DISCOVERY DESCRIPTION Special Testing 32  
 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 51 52 53 54 55 56 57 58 59 60  
 1 6 ACTIVITY RELEASED Z 33 CONTENT OF RELEASE Z 34 AMOUNT OF ACTIVITY NA 35 LOCATION OF RELEASE NA 36  
 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 51 52 53 54 55 56 57 58 59 60  
 1 7 PERSONNEL EXPOSURES NUMBER 0 0 0 37 TYPE Z 38 DESCRIPTION NA 39  
 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 51 52 53 54 55 56 57 58 59 60  
 1 8 PERSONNEL INJURIES NUMBER 0 0 0 40 DESCRIPTION NA 41  
 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 51 52 53 54 55 56 57 58 59 60  
 1 9 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION NA 43  
 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 51 52 53 54 55 56 57 58 59 60  
 2 0 PUBLICITY ISSUED N 44 DESCRIPTION NA 45  
 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 51 52 53 54 55 56 57 58 59 60

8401030271 831222  
 PDR ADOCK 05000324  
 S PDR

NAME OF PREPARER M. J. Pastva, Jr.

PHONE 919-457-9521

**CP&L**

Carolina Power & Light Company

Brunswick Steam Electric Plant

P. O. Box 10429

Southport, NC 28461-0429

December 22, 1983

FILE: B09-13510C  
SERIAL: BSEP/83-3942

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 2-83-97

Dear Mr. O'Reilly:

In accordance with Section 6.9.1.8c 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 November 21, 1983. In a letter dated November 21, 1983, Serial No. BSEP/83-3734, it was conveyed that this event would be reported no later than fourteen days following the completion of the testing, evaluation, and any required corrective actions which occurred on December 12, 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

MJP/joh/LETJH1

Enclosure

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

OFFICIAL COPY

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Based on the results of the second phase of weld testing, an additional 46 welds were inspected in accordance with the sampling provision of IEB 83-02 and IWB 2430 of ASME Section XI. This phase of testing revealed five additional welds with crack indications which are shown in Table 3.

TABLE 3

Weld	Configuration	Orientation	Length	Thru Wall %	Location
B32-12"-BR-J2	Pipe to elbow	Circumferential	2.25"	12.0%	Elbow side
B32-12"-BR-K2	Pipe to elbow	Circumferential	1.25"	11.0%	Elbow side
B32-28"-A13	Pipe to valve	Circumferential	0.5"	19.0%	Pipe side
B32-28"-B9	Valve to pipe	Skewed	1.0"	17.6%	Pipe side
B32-28"-B5	Pipe to pipe	Circumferential	2.375"	22.0%	Pipe (upstream)
B32-28"-B5	Pipe to pipe	Circumferential	3.0"	15.0%	Pipe (upstream)
B32-28"-B5	Pipe to pipe	Circumferential	1.5"	19.0%	Pipe (upstream)

Considering the results of the third phase of weld testing, the remaining 26 welds were voluntarily tested for 100% compliance with IEB 83-02 and IGSCC Inspection Order Confirming Shutdown, dated August 26, 1983. During this phase of weld testing, three additional welds with crack indications were revealed and are shown in Table 4.

TABLE 4

Weld	Configuration	Orientation	Length	Thru Wall %	Location
G31-6"-15	Elbow to pipe	Circumferential	1.25"	16.0%	Elbow side
G31-6"-16	Pipe to pipe	Circumferential	0.75"	8.0%	Pipe (downstream)
B32-22"-AM-5	Pipe - Cross/ discharge	Circumferential and Skewed	11.5" Inter- mittent	20.0%	Pipe side

The 19 crack indications discovered during testing are attributed to IGSCC. Eight of these indications, shown in Table 5, were repaired using acceptable weld overlay techniques. During the repair of welds B32-12"-K2, B32-12"-K3, and G31-6"-15, indications were detected that are believed to result from through-wall defects. Details concerning the discovery and repair of these defects are contained in the submittal of Serial No. LAP-83-549. The remaining 11 crack indications were evaluated by NUTECH and determined acceptable for deferring their weld overlay repair until a scheduled Spring 1984 Unit No. 2 outage.

TABLE 5

Welds Repaired Using Overlay Technique

G31-6"-15	B32-12"-BR-J3
G31-6"-16	B32-12"-BR-K2
G31-6"-10	B32-12"-BR-K3
B32-12"-BR-J2	B32-12"-BR-G4

Additional information concerning this event is provided in Carolina Power & Light Company's response to IE Bulletin 83-02, Serial No. BSEP/83-3748.