

03/16/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)  
DISTRIBUTION FOR INCOMING MATERIAL

50-261

REC: OREILLY J P  
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CAROLINA PWR & LIGHT

DOCDATE: 03/06/78  
DATE RCVD: 03/14/78

DOCTYPE: LETTER NOTARIZED: NO  
SUBJECT:

COPIES RECEIVED  
LTR 1 ENCL 1

LICENSEE EVENT REPT (RO 50-261/78-04) ON 02/17/78 CONCERNING DURING  
SHUTDOWN FOR REFUELING OUTAGE, SMALL PINHOLE LEAKS WERE FOUND ON  
TWO CANOPY SEAL WELDS (ONE CRDM AND ONE SPARE PLUG).

PLANT NAME: H B ROBINSON - UNIT 2

REVIEWER INITIAL: XJM  
DISTRIBUTOR INITIAL: DL

\*\*\*\*\* DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS \*\*\*\*\*

INCIDENT REPORTS  
(DISTRIBUTION CODE A002)

FOR ACTION: BR CHIEF SCHWENCER\*\*W/4 ENCL

INTERNAL:

REG FILE\*\*W/ENCL

~~I & E\*\*W/2 ENCL~~

SCHROEDER/IPPOLITO\*\*W/ENCL

NOVAK/CHECK\*\*W/ENCL

KNIGHT\*\*W/ENCL

HANAUER\*\*W/ENCL

EISENHUT\*\*W/ENCL

SHAD\*\*W/ENCL

KREGER/J. COLLINS\*\*W/ENCL

K SEYFRIT/IE\*\*W/ENCL

NRC PDR\*\*W/ENCL

MIPC\*\*W/3 ENCL

HOUSTON\*\*W/ENCL

GRIMES\*\*W/ENCL

BUTLER\*\*W/ENCL

TEDESCO\*\*W/ENCL

BAER\*\*W/ENCL

VOLLMER/BUNCH\*\*W/ENCL

ROSA\*\*W/ENCL

EXTERNAL:

LPDR'S

HARTSVILLE, SC\*\*W/ENCL

TIC\*\*W/ENCL

NSIC\*\*W/ENCL

ACRS CAT B\*\*W/16 ENCL

DISTRIBUTION: LTR 45 ENCL 45  
SIZE: 1P+1P+1P

CONTROL NBR: 780740031

\*\*\*\*\* THE END \*\*\*\*\*



Carolina Power & Light Company

March 6, 1978

FILE: NG-3516 (R)

SERIAL: GD-78-634

Mr. James P. O'Reilly, Director  
U. S. Nuclear Regulatory Commission  
Region II, Suite 1217  
230 Peachtree Street, N.W.  
Atlanta, Georgia 30303



H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET 50-261  
LICENSE NO. DPR-23  
LICENSEE EVENT REPORT 78-04

Dear Mr. O'Reilly:

In accordance with Section 6.9.2 of the Technical Specifications for the H. B. Robinson Steam Electric Plant, Unit 2, the attached Licensee Event Report is submitted. This report fulfills the requirement for a written report within fourteen (14) days of a reportable occurrence and is in accordance with the format set forth in NUREG-0161, July, 1977.

Yours very truly,

H. R. Banks  
Manager  
Nuclear Generation

DCS:tme\*

Attachment

cc: Messrs. R. A. Hartfield  
E. Volgenau

780740031

A002  
S  
1/1

Supplementary Information For  
Reportable Occurrence 78-04

1. Report No.: 50-261/78-04
- 2a. Report Date:
- 2b. Occurrence Date: February 17, 1978
3. Facility: H. B. Robinson Unit No. 2, Hartsville, S. C. 29550
4. Identification of Occurrence: On February 17, 1978, while inspecting the reactor vessel head, small pinhole leaks were found on two canopy seal welds. This constitutes a reportable occurrence in accordance with Technical Specifications Paragraph 6.9.2.a.3.
5. Conditions Prior to Occurrence: The plant was shut down for a refueling outage, and the reactor vessel head was sitting on its storage pad.
6. Description of Occurrence: On February 17, 1978, the reactor vessel head was being inspected for possible leakage in the vicinity of the CRDM canopy seal welds. Crystallized boric acid had been noted around two canopy seals. Pinhole leaks were noted on the seal welds at core locations D-4 (3 holes) and G-7 (1 hole). Procedures are now being implemented to repair the leaks.
7. Designation of Apparent Cause of Occurrence: Examination of the weld surfaces revealed that the leaks were of pinhole size and circular in shape and were not the result of weld cracking. It appears that the leaks were the result of weld degradation. The precise mechanism resulting in the degradation is currently unknown.
8. Analysis of Occurrence: The machined and threaded surfaces of each vessel head stub assembly provide primary and secondary pressure boundaries, respectively, for the reactor coolant. The seal weld only contains the minute leakage that might occur past the machined and threaded joint. Therefore, the pinhole leaks do not result in any adverse effects to plant operation or to the public health and safety.
9. Corrective Action: Weld repair and non-destructive examination of all pinhole leaks will be performed. Following this procedure, the head adapter plugs and control rod drive mechanisms will be ready for return to service.
10. Failure Data: Pinhole leaks had been found previously on three (one CRDM and two plugs) canopy seal welds at locations C-9, D-4 and L-13 on November 17, 1976. Reference HBR 2 RO 76-20. The current leaks at location D-4 appear to be in an area different from that previously repaired.

## LICENSEE EVENT REPORT

• CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 7 8 S C H B R 2 14 2 0 0 - 0 0 0 0 0 - 0 0 25 3 4 1 1 1 1 30 4 57 CAT 58 5

LICENSEE CODE LICENSE NUMBER LICENSE TYPE

CON'T

0 1 7 8 REPORT SOURCE 60 6 0 5 0 0 0 2 6 1 7 0 2 1 7 7 8 8 0 3 0 6 7 8 9

DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During shutdown for a refueling outage, small pinhole leaks were found on two canopy  
0 3 | seal welds (one CRDM and one spare plug). Similar leaks were discovered and repaired  
0 4 | during the 1976 refueling outage (Re: HBR2-RO-76-20). Due to the minute leakage  
0 5 | occurring from the failure, no adverse consequences resulted from the event. Repair  
0 6 | of the welds is currently in progress. (RO-78-04)  
0 7 |  
0 8 |

SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE	
0	9	C	1	E	12	C	13	C	R	D	R	V	E
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	7	8	—	0	0	4	—	0	1	T	—	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.	
B	18	Z	19	Z	20	Z	21	0	0	0	0	Y	23
33	34	35	36	37	38	39	40	41	42	43	44	45	46
PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER											
N	25	W	1	2	0	26							
47	48	49	50	51	52	53							

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | Pinhole leaks found at locations D-4 and G-7 on canopy seal welds were apparently  
1 1 | the result of weld degradation.  
1 2 |  
1 3 |  
1 4 |

FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION	
1	5	H	28	0	0	0	29	NA	30
ACTIVITY		CONTENT		AMOUNT OF ACTIVITY		LOCATION OF RELEASE			
1	6	Z	33	Z	34	NA	35	NA	36
PERSONNEL EXPOSURES		NUMBER		TYPE		DESCRIPTION			
1	7	0	0	0	37	Z	38	NA	39
PERSONNEL INJURIES		NUMBER		DESCRIPTION					
1	8	0	0	0	40			NA	41
LOSS OF OR DAMAGE TO FACILITY		TYPE		DESCRIPTION					
1	9	Z	42			NA			43
PUBLICITY		ISSUED		DESCRIPTION					
2	0	N	44			NA			45
								NRC USE ONLY	

NAME OF PREPARER R. B. Starkey, Jr.

PHONE: (803) 332-1351