

50-261

## NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

INCIDENT REPORT

TO: Norman C. Moseley

FROM: Carolina Power & Light  
Raleigh N. C. 27602  
H. R. Banks

DATE OF DOCUMENT

12-1-76

DATE RECEIVED

12-3-76

NUMBER OF COPIES RECEIVED

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☒ LETTER☐ NOTORIZED

PROP

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☐ ORIGINAL☒ UNCLASSIFIED☒ COPY

DESCRIPTION Ltr. Trans The Following:

ACKNOWLEDGED  
DO NOT REMOVE

PLANT NAME: H. B. Robinson Unit No. 2

ENCLOSURE - Licensee Event Report HBR-2-RO-76-20  
occurring on 11-17-76 Advising that small  
pinhole leaks were found on three canopy seal  
welds and have been re-welded and non-  
destructively examined...

( 1 encl. rec'd )

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED  
SEND DIRECTLY TO KREGER/J. COLLINS

FOR ACTION/INFORMATION

jcm 12-3-76

☒ BRANCH CHIEF: **Reid**  
☒ W/3 CYS FOR ACTION  
☒ LIC. ASST.: **Ingram**  
☒ W/1 CYS  
☒ ACRS **16** CYS ~~HOLDING~~/SENT TO **Cat B**  
**12-3-76**

INTERNAL DISTRIBUTION

☒ REG FILE  
☒ NRC PDR  
☒ I & E (2)  
☒ MIPC  
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☒ GRIMES  
☒ CASE  
☒ DUPLER  
☒ HANAUER  
☒ PEDREGO/MACCARY  
☒ EISENHUT  
☒ BAER  
☒ SHAO  
☒ VOLLMER/LUNCH  
☒ KREGER/J. COLLINS

EXTERNAL DISTRIBUTION

☒ LPDR: Hartsville, S.C.  
☒ TTC:  
☒ NJIC:

CONTROL NUMBER

T 12210  
NO 4

# Regulatory Docket File

December 1, 1976

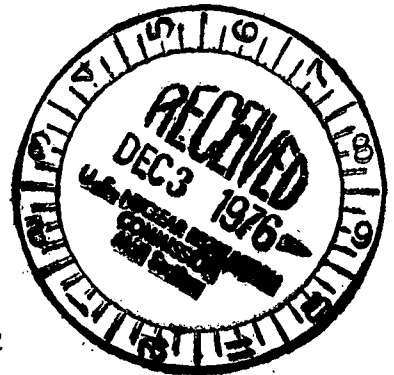
FILE: NG-3513 (R)

SERIAL: NG-76-1542

Mr. Norman C. Moseley, Director  
U. S. Nuclear Regulatory Commission  
Region II, Suite 818  
230 Peachtree Street, N.W.  
Atlanta, Georgia 30303

Dear Mr. Moseley:

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET 50-261  
LICENSE NO. DPR-23  
LICENSEE EVENT REPORT 76-20



In accordance with Section 6.9.2.a 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 Regulatory Guide 1.16, Revision 4.

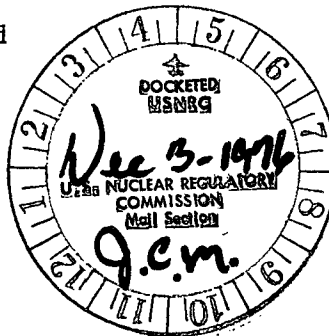
Yours very truly,

H. R. Banks  
Manager  
Nuclear Generation

CSB:mls

Attachment

cc: Messrs. W. G. McDonald  
E. Volgenau



12210



Supplementary Information For  
Reportable Occurrence 76-20

1. Report No: 50-261/76-20
- 2a. Report Date: November 26, 1976
- 2b. Occurrence Date: November 27, 1976
3. Facility: H. B. Robinson Unit No. 2  
Hartsville, SC 29550

4. Identification of Occurrence:

On November 17, 1976, while inspecting the reactor vessel head, small pinhole leaks were found on three 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 November 17, 1976, the reactor vessel head was being inspected for possible leakage. Crystallized boric acid had been noted around several canopy seals, and these areas were being examined following removal of the boric acid. Pinhole leaks were noted on the control rod drive mechanism (CRDM) seal weld at location C-9 and on the seal welds of plugs at locations D-4 and L-13. Once the surfaces were thoroughly cleaned and the pinhole leaks positively identified, the welds were repaired and nondestructively examined. Following the examination, the canopy seal welds were ready for return to service.

7. Designation of Apparent Cause of Occurrence:

Examination of the weld surfaces revealed that the leaks were of pinhole size and were not the result of weld cracking. It appears that the leaks were the result of weld degradation.

8. Analysis of Occurrence:

The pinhole leaks did not result in any adverse effects to plant operation or to public health and safety. The machined and threaded surfaces of each canopy provide primary and secondary pressure boundaries for the reactor coolant respectively. The seal weld only contains any minute leakage that may occur past the machined and threaded joint.

9. Corrective Action:

Weld repair and nondestructive examination of all pinhole leaks was performed. Following the examination, the head adapter plugs and control rod drive mechanisms were ready for return to service.

10. Failure Data:

No previous failures of this type have occurred.

*Central File*  
*50-261*

Mr. Norman C. Moseley, Director  
Directorate of Regulatory Operations  
U. S. Nuclear Regulatory Commission  
Region II, Suite 818  
230 Peachtree Street, N.W.  
Atlanta, Georgia 30303

Dr. Ernst Volgenau, Director  
Regulatory Operations  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20545

Dear Sirs:

In accordance with section 6.9.2.a.3 of the Technical Specifications, the following occurrence is reported.

On November 17, 1976, while inspecting the reactor vessel head, it was found that the canopy seal welds for two control rod drive mechanism housings had small pin-hole leaks. The plant was in a refueling shutdown condition with the reactor vessel head off the vessel.

This was reported to Mr. Dick Parker of NRC, Atlanta, who was on site at the time and to Mr. John Connelly of the Nuclear Generation Section, Raleigh, on November 18, 1976.

Yours very truly,



Jack B. McGirt, Manager  
H. B. Robinson SEC Plant

KEB/ld



Carolina Power & Light Company

December 1, 1976

FILE: NG-3513 (R)

SERIAL: NG-76-1542

Mr. Norman C. Moseley, Director  
U. S. Nuclear Regulatory Commission  
Region II, Suite 818  
230 Peachtree Street, N.W.  
Atlanta, Georgia 30303

Dear Mr. Moseley:

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET 50-261  
LICENSE NO. DPR-23  
LICENSEE EVENT REPORT 76-20

In accordance with Section 6.9.2.a 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 Regulatory Guide 1.16, Revision 4.

Yours very truly,

H. R. Banks  
Manager  
Nuclear Generation

CSB:mls

Attachment

cc: Messrs. W. G. McDonald  
E. Volgenau

# CENSEE EVENT REPORT

CONTROL BLOCK: 1         6

[PLEASE PRINT ALL REQUIRED INFORMATION]

<small>LICENSEE NAME</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">01</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">S</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">C</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">H</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">B</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">R</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div>	<small>LICENSE NUMBER</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">-</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">-</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<small>LICENSE TYPE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">4</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div>	<small>EVENT TYPE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div>
7 8 9 14	15 25	26 30	31 32

<small>CONT</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">01</div>	<small>CATEGORY</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>	<small>REPORT TYPE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">T</div>	<small>REPORT SOURCE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">L</div>	<small>DOCKET NUMBER</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">5</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">-</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">6</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div>	<small>EVENT DATE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">7</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">7</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">6</div>	<small>REPORT DATE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">7</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">6</div>
7 8	57 58	59	60	61 68	69 74	75 80

EVENT DESCRIPTION

02 During shutdown for a refueling outage, small pinhole leaks were found on three (one

03 CRDM and two plugs) canopy seal welds. The affected surfaces were cleaned, repair

04 welded, and nondestructively examined. No previous failures of this type have

05 occurred. HBR 2 RO 76-20

06

<small>SYSTEM CODE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">07</div>	<small>CAUSE CODE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">C</div>	<small>COMPONENT CODE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">I</div>	<small>PRIME COMPONENT SUPPLIER</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">E</div>	<small>COMPONENT MANUFACTURER</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">C</div>	<small>VIOLATION</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">R</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">D</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">R</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">V</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">E</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">N</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">W</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">L</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">4</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">N</div>
7 8 9 10	11	12	17	43	44	47	48								

CAUSE DESCRIPTION

08 Pinhole leaks found at locations C-9, D-4 and L-13 on canopy seal welds were apparently

09 the result of weld degradation.

10

<small>FACILITY STATUS</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">11</div>	<small>% POWER</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">H</div>	<small>OTHER STATUS</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<small>METHOD OF DISCOVERY</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">NA</div>	<small>DISCOVERY DESCRIPTION</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">B</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Outage inspection</div>
7 8 9	10	12	13	44	45	46	80

<small>FORM OF ACTIVITY RELEASED</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">12</div>	<small>CONTENT OF RELEASE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">F</div>	<small>AMOUNT OF ACTIVITY</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">F</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">NA</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">NA</div>	<small>LOCATION OF RELEASE</small>
7 8 9	10	11	44	45	80

PERSONNEL EXPOSURES

<small>NUMBER</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">13</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<small>TYPE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">F</div>	<small>DESCRIPTION</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">NA</div>
7 8 9	11	12	13	80	80

PERSONNEL INJURIES

<small>NUMBER</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">14</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div>	<small>DESCRIPTION</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">NA</div>
7 8 9	11	12	80	80

OFFSITE CONSEQUENCES

15 NA

LOSS OR DAMAGE TO FACILITY

<small>TYPE</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">16</div>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">F</div>	<small>DESCRIPTION</small> <div style="border: 1px solid black; padding: 2px; display: inline-block;">NA</div>
7 8 9	10	80

PUBLICITY

17 NA

ADDITIONAL FACTORS

18 NA

19

NAME: J. B. McGirt

PHONE: (803) 332-1351



Supplementary Information For  
Reportable Occurrence 76-20

1. Report No: 50-261/76-20
- 2a. Report Date: November 26, 1976
- 2b. Occurrence Date: November 27, 1976
3. Facility: H. B. Robinson Unit No. 2  
Hartsville, SC 29550

4. Identification of Occurrence:

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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.

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7. Designation of Apparent Cause of Occurrence:

Examination of the weld surfaces revealed that the leaks were of pinhole size and were not the result of weld cracking. It appears that the leaks were the result of weld degradation.

8. Analysis of Occurrence:

The pinhole leaks did not result in any adverse effects to plant operation or to public health and safety. The machined and threaded surfaces of each canopy provide primary and secondary pressure boundaries for the reactor coolant respectively. The seal weld only contains any minute leakage that may occur past the machined and threaded joint.

9. Corrective Action:

Weld repair and nondestructive examination of all pinhole leaks was performed. Following the examination, the head adapter plugs and control rod drive mechanisms were ready for return to service.

10. Failure Data:

No previous failures of this type have occurred.

US EAC  
REGULATORY OPERATIONS  
REGION II  
ATLANTA, GA.

DEC 3 8 35 AM '76