U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

Field	Value
01 Licensee Code (2)	S C H B R 2
License Number (3)	0 0 - 0 0 0 0 0 - 0 0
License Type (4)	4 1 1 1 1
CAT (5)	
CON'T 01 Report Source (6)	L
Docket Number (7)	0 5 0 0 0 2 6 1
Event Date (8)	0 4 2 6 7 9
Report Date (9)	0 5 1 0 7 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 During shutdown for the 1979 refueling outage, small pin hole leaks were discovered on
03 4 canopy seal welds. (1 lower and 3 middle canopy seal welds). Similar leaks were
04 discovered and repaired during the 1976 and 1978 refueling outages. (Ref: HBR
05 2-HO-76-20 and HBR 2-RO-78-04). Due to the minute leakage occurring from the defects,
06 no adverse consequences resulted from the occurrence.
07
08

09	Value
System Code (11)	C A
Cause Code (12)	E
Cause Subcode (13)	C
Component Code (14)	C R D R V E
Comp. Subcode (15)	Z
Valve Subcode (16)	Z

(17) LER/RO Report Number

Event Year		Sequential Report No.		Occurrence Code	Report Type		Revision No.
7 9	—	0 1 1	/	0 1	T	—	0

Action Taken (18)	Future Action (19)	Effect on Plant (20)	Shutdown Method (21)	Hours (22)	Attachment Submitted (23)	NPRD-4 Form Sub. (24)	Prime Comp. Supplier (25)	Component Manufacturer (26)
B	X	Z	Z	0 0 0 0	Y	Y	N	W 1 2 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Pin hole leaks found at locations K6, L5, and N7 were apparently the result of weld
11 degradation. The defects were repaired and non-destructive examination of all repair
12 welds performed. NSSS supplier is conducting an evaluation of this type failure.
13
14

15	Facility Status (28)	% Power (29)	Other Status (30)	Method of Discovery (31)	Discovery Description (32)
	H	0 0 0	NA	B	Outage Inspection

16	Activity Released (33)	Content of Release (34)	Amount of Activity (35)	Location of Release (36)
	Z	Z	NA	NA

Personnel Exposures

17	Number (37)	Type (38)	Description (39)
	0 0 0	Z	NA

Personnel Injuries

18	Number (40)	Description (41)
	0 0 0	NA

Loss of or Damage to Facility (43)

19	Type (42)	Description
	Z	NA

Publicity

20	Issued (44)	Description (45)
	N	NA

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SUPPLEMENTARY INFORMATION
FOR
REPORTABLE OCCURRENCE 79-11

I. Cause Description & Analysis:

On April 26, 1979, while inspecting the reactor vessel head, small pinhole leaks were found on four canopy seal welds. The canopy seal welds are tertiary reactor coolant pressure boundaries. The degradation of a reactor coolant pressure boundary constitutes a reportable occurrence in accordance with Technical Specification Paragraph 6.9.2.a.3. The locations of the weld defects are as follows:

1. Lower canopy seal at location N6.
2. Middle canopy seal at location L5.
3. Middle canopy seal at location M6.
4. Middle canopy seal at location N7.

The defects are apparently the result of weld degradation since leaks have not been found at any other location on the vessel head stub assemblies.

The failures are located in the filler material and heat effected zones of the seal welds. The cause of these defects are thus believed to be related to the welding process (i.e., interpass temperature control or gas purge problems). These failures may also be related to a thermal cycling which these welds might undergo during reactor heatup and cooldown. All failures which have occurred to date are local to the canopy seal welds and in no way indicate a concern with the load bearing machined and threaded region of the mechanism.

The machined and threaded surfaces of each vessel head stub assembly provide primary and secondary pressure boundaries, respectively, for the reactor coolant. The threaded portions of the seal are forged or cast. The threaded region consists of ACME threads which are chrome plated and conservatively designed. The seal welds contain only 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.

II. Corrective Action:

All weld defects were repaired and non-destructive examination performed on the repair welds.

III. Corrective Action To Prevent Further Occurrences

NSSS Supplier is continuing its investigation of this type failure in an effort to identify the precise failure mechanism. Further corrective action will be contingent upon the results of this investigation.