NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

Line	Field	Value
01	LICENSEE CODE (2)	NCBEP1
01	LICENSE NUMBER (3)	00-00000-00
01	LICENSE TYPE (4)	41111
01	CAT (5)	
01 CON'T	REPORT SOURCE (6)	L
01	DOCKET NUMBER (7)	050-0325
01	EVENT DATE (8)	101082
01	REPORT DATE (9)	111282

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 While performing ADS Valve Operability Test, PT-11.1.2, at 200 psig reactor pressure
03 on 10-10-82, S/RV valve 1B21-F013J, failed to reclose until 50-100 psig reactor pres-
04 sure. Performance of this PT on 10-13-82 revealed S/RV valves 1-B21-F013D and E
05 would not open at 200 psig reactor pressure. However, while performing this PT on
06 10-14-82 S/RV F013E was manually opened, but responded slowly. In each case, the unit
07 was then placed into cold shutdown. Neither event affected the health and safety of
08 the public. Technical Specifications 4.5.2b, 6.9.1.9b

Line 09	SYSTEM CODE (11)	CAUSE CODE (12)	CAUSE SUBCODE (13)	COMPONENT CODE (14)	COMP. SUBCODE (15)	VALVE SUBCODE (16)
09	CJ	E	B	VALVOP	F	Z

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	82	—	108	/	03	L	—	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)
A	X	A	A	0080	Y	Y	N	T020

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 F013J failed to reclose because its solenoid valve failed to close, attributed to
11 a faulty spring within the solenoid valve. The defective solenoid valve was replaced
12 along with the valve pilot assembly and F013J was tested satisfactorily. The problems
13 affecting F013D and E have not yet been determined. Both valves were replaced in their
14 entirety and tested satisfactorily.

Line 15	FACILITY STATUS (28)	% POWER (29)	OTHER STATUS (30)	METHOD OF DISCOVERY (31)	DISCOVERY DESCRIPTION (32)
15	C	004	NA	B	Periodic Test

Line 16	ACTIVITY RELEASED (33)	CONTENT OF RELEASE (34)	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
16	Z	Z	NA	NA

PERSONNEL EXPOSURES

Line 17	NUMBER (37)	TYPE (38)	DESCRIPTION (39)
17	000	Z	NA

PERSONNEL INJURIES

Line 18	NUMBER (40)	DESCRIPTION (41)
18	000	NA

LOSS OF OR DAMAGE TO FACILITY (43)

Line 19	TYPE (42)	DESCRIPTION
19	Z	NA

PUBLICITY

Line 20	ISSUED (44)	DESCRIPTION (45)
20	N	

8211220259 821112
PDR ADOCK 05000325
S PDR

NRC USE ONLY

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GPO 917-926

LER ATTACHMENT RO #1-82-108

Facility: BSEP Unit No. 1 Event Date: October 10, 1982

While performing the ADS System Valve Operability Test, PT-11.1.2, during Unit No. 1 startup at a reactor pressure of 200 psig, S/RV 1B21-F013J failed to reclose until reactor pressure was 50-100 psig. The reactor was then placed in cold shutdown. On October 13, 1982, while performing this PT, S/RV valves 1-B21-F013D and E failed to open at a reactor pressure of 200 psig. Following this event, the unit was again placed into cold shutdown.

An inspection of the F013J, Model No. 7567F, revealed the F013J solenoid valve open with noninterruptible instrument air still exhausting through the solenoid valve outlet port. When the solenoid valve air supply was isolated, the solenoid valve closed. The F013J solenoid valve was then removed and bench tested satisfactorily. An investigation of this problem by an on-site representative of the valve vendor concluded the unusual valve operation was caused by a faulty spring within the solenoid valve. The valve vendor, Target Rock Corporation, acknowledges that solenoid valve spring relaxation is a design problem and consequently, they have developed a more reliable replacement spring. The design modification changed the material from the original 302SS to Inconel-718. This modification was completed for all solenoid valves in Unit No. 2 during this 1982 refueling outage. The remaining Unit No. 1 solenoid valves will be modified during the 1982 refueling outage scheduled for November 27, 1982.

The problem solenoid valve on S/RV F013J was modified with the improved spring material. As a preventive measure, the valve pilot assembly was also replaced. During subsequent performance of PT-11.1.2 on October 13, 1982, F013J tested satisfactorily.

Following the discovery of problems affecting the opening capabilities of S/RV F013D and E, an inspection of both valves was performed. This inspection, which was conducted with the assistance of the valve vendor representative, was unsuccessful in determining what problems affected both valves. Both valves were replaced in their entirety and were tested satisfactorily. Also, the solenoid valves for these valves were modified with the improved spring material. Both failed valve units are presently being laboratory tested to determine the cause of their failures. Following a determination of the problems affecting F013D and E, a supplement outlining the cause and corrective action for each failure will be submitted.