

CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	M	D	C	C	N	1	2	0	0	-	0	0	0	0	-	0	0	3	4	1	1	1	1	4			5		
7	8	LICENSEE CODE						14	15	LICENSE NUMBER								25	26	LICENSE TYPE				30	57	CAT	58			59

CON'T

REPORT SOURCE: 01 L 0500031177 011481 3 012831 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | At 1050 the shift supervisor was notified that a feedwater transmitter
0 3 | which is used in calculating calorimetric power was out of calibration.
0 4 | This resulted in erroneous adjustments to all four excore nuclear in-
0 5 | strument channels on 1-11-81 causing power to indicate approximately
0 6 | 4.5. percent low. The nuclear instruments were immediately readjusted.
0 7 | This report is at the request of the NRC Resident Inspector since no
0 8 | LCO's were violated and all RPS trips were operable.

09		SYSTEM CODE CH		CAUSE CODE E		CAUSE SUBCODE E		COMPONENT CODE INSTRU				COMP. SUBCODE T		VALVE SUBCODE Z	
7	8	9	10	11	12	12	13	13	14	15	16	17	18	19	20
17		EVENT YEAR 81		SEQUENTIAL REPORT NO. 001		OCCURRENCE CODE 01		REPORT TYPE T		REVISION NO. 0		ACTION TAKEN A		FUTURE ACTION X	
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
EFFECT ON PLANT Z		SHUTDOWN METHOD Z		HOURS 0000		ATTACHMENT SUBMITTED Y		NPRD-4 FORM SUB. Y		PRIME COMP. SUPPLIER N		COMPONENT MANUFACTURER F120		37	
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

1 0 | Feedwater flow transmitter 1-FE-1111 (Fischer & Porter No. 10R2406PR)

1 1 | failed to maintain its calibration. The transmitter output was found

1 2 | to be low. It was replaced with a spare. Bench-testing has not shown a

1 3 | reason for the apparent shift in calibration which occurred. The trans-

1 4 | mitter will be returned to its manufacturer for testing and repair.

FACILITY STATUS (1) 5 (2) E (3) 28 (4) 29 (5) 30
% POWER (6) 0 (7) 5 (8) 0 (9) 29 (10) NA (11) 31 (12) 32
METHOD OF DISCOVERY (13) C (14) 31 (15) 32
DISCOVERY DESCRIPTION (16) Post Refueling Physics Test

ACTIVITY CONTENT
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

1 6 Z (33) NA (34) (35) (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

PERSONNEL EXPOSURES

NUMBER				TYPE	DESCRIPTION
1	7	0	0	0	37 Z 38 NA 39

PERSONNEL INJURIES		NUMBER		DESCRIPTION	
1	2	0	0	0	40 NA

		LOSS OF OR DAMAGE TO FACILITY		
		TYPE	DESCRIPTION	(43)
1	9	Z	(42) NA	

7 8 9 10 30
PUBLICATION
ISSUED DESCRIPTION (45) 810 6090 703
2 0 1 44 NA
NRC USE ONLY
7 8 9 10 58 59 60

NRC USE ONLY

NAME OF PREPARER S.M. Davis/P.G. Rizzo

PHONE: (301) 269-4742/4726

LER NO. 81-01/1T
DOCKET NO. 50-318
LICENSE NO. DPR-69
EVENT DATE 1-14-81
REPORT DATE 1-28-81
ATTACHMENT

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (CONT'D)

At 1050 on 1-14-81 with Unit 1 at 50 percent power (indicated) for post refueling physic tests, the shift supervisor was notified by Instrument Maintenance and Fuel Management that a feedwater flow transmitter which is used in calculating calorimetric power was out of calibration. This problem resulted in erroneous adjustments being made to all four reactor protective system nuclear instrument channels on 1-11-81, and causing power to indicate approximately 4.5 percent low. The nuclear instruments were immediately readjusted.

Since the unit was returning to service following an eleven week scheduled refueling and maintenance outage, it can be conservatively assumed that the flow transmitter was rendered out of calibration during the idle time. Therefore, it has been concluded that no license limits or limiting condition for operation were violated since variable over-power and all other RPS trips were operable and the unit did not exceed 60 percent power during the feedwater flow transmitter problem. Nevertheless, this report is being made at the request of the NRC Resident Inspector.

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (CONT'D)

The plant was undergoing startup testing after completion of a refueling and maintenance outage. After reaching 50 percent power, discrepancies were noted among plant parameters, particularly electrical output, excore nuclear instrumentation power level, and primary temperatures used in calculating $Rx \Delta T$.

Feedwater flow loop F-1111 was suspected to be in error due to low indication. "Hand calorimetric" data was collected and compared with previous 50 percent test program data. The comparison showed the F-1111 signal level about 0.5×10^6 lbs./Hr. less than the expected value for 50 percent. Other parameters were near normal. Several calculations based on other parameters such as primary flow, ΔT and secondary calorimetric inputs showed that the normal calorimetric calculation from the plant computer was between 4.2 and 4.5 percent low. This approximated the 0.5×10^6 lbs./Hr. error in the F-1111 loop signal.

After consultation between the Instrument Maintenance supervisor and the Nuclear Fuel Management group's shift engineer, a conservative correction of 6 percent power was made to the excore nuclear instrument channels. Subsequent troubleshooting and replacement of the feedwater flow transmitter restored the calorimetric input signal accuracy.

POOR ORIGINAL

In the case at hand, no deficiency was at first known to exist. Abnormal high electrical output was attributed to turbine and secondary maintenance during the recent outage. Close inspection and comparison of plant parameters revealed a potential problem existed. The Operations Section General Supervisor has instructed plant operators to ensure any suspected out of tolerance conditions are promptly brought to the attention of plant maintenance personnel.