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LICENSEE CODE					14	LICENSE NUMBER										25	LICENSE TYPE					30	CAT 58				

REPORT SOURCE L 6 0 5 0 0 0 3 4 8 7 0 5 2 2 8 1 8 0 6 0 5 2 1 - 9
60 61 DOCKET NUMBER 63 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

012 | Westinghouse notified Alabama Power Company that the Westinghouse Water Reactor Division's
013 | Safety Review Committee has identified a potential control and protection system inter-
014 | action concern involving the Volume Control Tank (VCT) level instrumentation control
015 | system. This situation represents a violation of the Nuclear Regulatory Commission regu-
016 | lations related to separation of protection and control systems and single failure cri-
017 | teria as delineated in GDC-24 and IEEE-279. Engineering review of this notification
018 | resulted in a determination on May 22, 1981, that this situation is reportable under

SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE						COMP. SUBCODE		VALVE SUBCODE			
C	J	B		A		Z	Z	Z	Z	Z	Z	Z		Z			
9	10	11	12	13	14	15	16	17	18	19	20	21	22				
EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.									
8	1	0	3	7	0	1	T	0	1								
21	22	23	24	25	26	27	28	29	30								
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	
G	Z	Z		Z					0	0	0	0	Y	N	Z	Z	9
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 Cause for postulated event is inadequate design/safety analysis review. Timely operator
2 action can negate the postulated scenario and positively address the identified concern.
3 FNP is equipped with instrument readouts which would indicate the presence of this
4 situation and numerous alarms would be actuated at various times in the event. FNP plant
5 procedures have been changed to assure that the operator would be properly alerted to

1 2 3 4 5 6 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 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

FACILITY STATUS (5) G (23) % POWER (0) (0) (0) (29) OTHER STATUS (30) NA METHOD OF DISCOVERY (D) (31) Notification by Westinghouse (32) DISCOVERY DESCRIPTION

ACTIVITY CONTENT (5) Z (33) (Z) (34) AMOUNT OF ACTIVITY (35) NA LOCATION OF RELEASE (36) NA

PERSONNEL EXPOSURES (7) (0) (0) (0) (37) (Z) (38) DESCRIPTION (39) NA

PERSONNEL INJURIES (3) (0) (0) (0) (40) DESCRIPTION (41) NA

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

PUBLICITY (10) (1) (44) DESCRIPTION (45) NA

ISSUED (10) (1) (44) DESCRIPTION (45) NA

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Event Description and Probable Consequences (continued)

Technical Specification 6.9.1.3.i (Unit 1) and 6.9.1.12.i (Unit 2). The postulated event is as follows:

Assume the plant is operating with a centrifugal charging pump performing the normal charging function. The failure of the VCT level control system (LT-115 or LT-112 failing high) causes the letdown flow to be diverted to the Recycle Holdup Tanks. The VCT liquid inventory is reduced due to normal charging without any makeup to the VCT due to letdown. Assuming LT-115 or LT-112 fails high, charging pump suction is not transferred to the RWST, and without operator intervention the VCT could empty causing the centrifugal charging pump to be damaged due to loss of suction fluid. The second centrifugal charging pump is then taken to be the assumed active failure. The RCS inventory decreases due to normal letdown flow and following letdown isolation, due to RCP seal leakage. However, borated water cannot be injected into the RCS from the centrifugal charging pumps. The operator must find a means to restore the primary inventory lost via letdown and RCP seal leakage. In addition, the operator must be capable of borating the RCS prior to going to a cold shutdown condition.

This scenario assumes that during normal plant operation, one charging pump is running with another on standby. Actually, three charging pumps exist, although the Technical Specifications require only two.

Following the failure in the VCT level control system, the operator would have approximately 10 minutes to transfer the charging pump suction from the VCT to the RWST, simply stop the pump, or restore letdown to the VCT.

If no operator action occurs at this time, then the pump in operation could be damaged due to loss of suction, and the plant would continue to lose inventory due to letdown. However, this is a slow loss in water inventory. Automatic letdown isolation should occur. Even without letdown isolation or operator intervention, approximately two days would elapse prior to core uncover. The operator would have considerable time to align the standby pump to the RWST.

The health and safety of the public were not affected by this event.
(Note: This LER is applicable to both Units 1 and 2 of FNP).

Cause Description and Corrective Actions (continued)

this situation and would take the appropriate action necessary to assure an adequate water supply to the charging pumps.