PALISADES PLANT

NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

0 1	M I P A L 1 (2) 0 0 - 0 0 0 0 0 - 0 0 (3) 4 1 1 1 1 (4) (5)
	LICENSEE CODE / LICENSE NUMBER / LICENSE TYPE / CAT
CON'T 0 1	REPORT SOURCE L (6) 0 5 0 0 0 2 5 5 (7) 0 8 1 9 8 2 (8) 0 9 1 7 8 2 (9)
	DOCKET NUMBER / EVENT DATE / REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During review of SEP Topics, it was determined that following a LOCA with
0 3 concurrent loss of off-site power and loss of either diesel generator, the
0 4 running service water pump(s) may trip as a result of going to runout.
0 5 Runout occurs as a result of the CCW heat exchanger outlet valves failing to
0 6 fully open position (results from loss of instrument air which occurs after
0 7 loss of offsite power). Condition not analyzed by FSAR; accordingly,
0 8 reportable per TS 6.9.2.a(9).

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	W A (11)	X (12)	Z (13)	Z Z Z Z Z Z (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 2	—	0 2 4	/	0 1	X	—	1

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
F (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	Z (25)	Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Event resulted from apparent oversight in initial plant design and FSAR
1 1 accident analysis. Problem eliminated by installation of hard stops on
1 2 CCW heat exchanger service water outlet valves and procedure change to align
1 3 Fire Water System to Service Water System if postulated condition occurs.
1 4

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	G (28)	0 0 0 (29)	NA	C (31)	Review of SEP Topic

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	NA	NA

	PERSONNEL EXPOSURES NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

	PERSONNEL INJURIES NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

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

	PUBLICITY ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	NA	

8209240351 820917
PDR ADOCK 05000255
S PDR

During review of Systematic Evaluation Program (SEP) topics, a potential problem with the service water system was discovered. Following a postulated Loss of Coolant Accident (LOCA) with a concurrent loss of off-site power, a loss of instrument air will occur resulting in the component cooling water (CCW) heat exchanger service water discharge valves failing to the full open position. With a loss of diesel generator 1-1, service water pump P-7B will stop. Calculations indicate that runout and subsequent trip of the remaining service water pumps, P-7A and P-7C, may occur, resulting in a loss of service water flow. Similarly, a loss of diesel generator 1-2 will cause a loss of P-7A and P-7C and a possible runout and trip of P-7B. This condition apparently resulted from an oversight in initial plant design and was overlooked during preparation of the FSAR accident analysis.

To correct the problem, hard stops were installed on the operators of the CCW heat exchanger discharge valves to limit the service water flow in the event of a loss of instrument air. Additionally, emergency operating procedures were revised to require alignment of the Fire Water System to the Service Water System if the postulated event occurs. These actions will assure that adequate cooling is provided and maintained to all critical Service Water System loads.