NRC FORM 366 (12-81)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

APPROVED BY OMB 3150-0011 EXPIRES 4-30-82

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

01 | LICENSEE CODE: P A S E S 1 (2) | LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) | LICENSE TYPE: 4 1 1 1 1 (4) | CAT (5)

CON'T 01 | REPORT SOURCE: L (6) | DOCKET NUMBER: 0 5 0 0 0 3 8 7 (7) | EVENT DATE: 0 9 1 0 8 2 (8) | REPORT DATE: 0 9 2 4 8 2 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 Prior to initial criticality, it was identified that a potential existed for
03 overload of the Class IE electrical system due to concurrent loading of Emer-
04 gency Service Water (ESW) pumps and either Residual Heat Removal (RHR) or Core
05 Spray (CS) pumps during an intermediate size LOCA. This situation was deter-
06 mined reportable per Technical Specification 6.9.1.8.i. No adverse consequences
07 resulted because the condition was identified prior to startup and controls were
08 applied to prevent reactor operation under conditions subject to this interaction

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
09	E B (11)	B (12)	F (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 1 2	/	0 1	T	—	0

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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The event resulted from inadequate evaluation of all potential interactions
11 caused by installation of a Reactor Vessel Low Pressure permissive into the
12 Core Spray and RHR pump start logic circuitry as an interim measure (prior to
13 Unit 2 operation), corrective action was taken to remove the permissive from
14 the logic circuit.

15 | FACILITY STATUS: B (28) | % POWER: 0 0 0 (29) | OTHER STATUS (30): n/a | METHOD OF DISCOVERY: D (31) | DISCOVERY DESCRIPTION (32): Engineering review

16 | ACTIVITY RELEASED: Z (33) | CONTENT OF RELEASE: Z (34) | AMOUNT OF ACTIVITY (35): n/a | LOCATION OF RELEASE (36): n/a

PERSONNEL EXPOSURES

17 | NUMBER: 0 0 0 (37) | TYPE: Z (38) | DESCRIPTION (39): n/a

PERSONNEL INJURIES

18 | NUMBER: 0 0 0 (40) | DESCRIPTION (41): n/a

LOSS OF OR DAMAGE TO FACILITY (43)

19 | TYPE: Z (42) | DESCRIPTION: n/a

PUBLICITY

20 | ISSUED: N (44) | DESCRIPTION (45): n/a | NRC USE ONLY

NAME OF PREPARER F.T. Eisenhuth PHONE: (717) 542-2181 X286

Licensee Event Report

Attachment to LER 82-012/01T-0

An engineering review of integrated ESF system operation identified a situation where differences in the initiation signals supplied to Emergency Service Water (ESW) pumps and the low pressure ECCS pumps could result in loadings on the Class 1E electrical system outside of design limits.

The Core Spray (CS) and Residual Heat Removal (RHR) pumps receive initiation signals on low reactor vessel level and on high drywell pressure. In series with the high drywell pressure signal is a low reactor vessel pressure permissive. The ESW pumps receive a start signal upon diesel generator automatic actuation, with a time delay designed to provide ESW pump loading after the low pressure ECCS pumps. Since the diesel generators are started on a low reactor vessel level or high drywell pressure signal (no reactor vessel pressure permissive), these effectively become the ESW start signals.

An intermediate sized break can be postulated such that a high drywell pressure signal would be received quickly, but where reactor vessel pressure and level remain above these setpoints for some period of time. In such a case, the ESW pumps would receive a start signal initiating their delay timers, while no signal would be received by the ECCS pumps. Further, if the break was sized appropriately, the delay in receipt of a start signal for the ECCS pumps (receipt of a vessel low level or pressure signal) could result in either RHR or CS pumps starting concurrent with ESW pumps. Such a condition exceeds electrical system design limits.

Since the reactor vessel low pressure permissive was installed as a result of LOCA/False LOCA consideration for 2 unit operation, it was determined that appropriate corrective action was to remove this input to the CS and RHR pump start circuitry. This modification is intended as an interim measure, suitable until operation of Unit 2.

When a permanent modification is determined that will correct the problem for 2 Unit operation, a followup report will be filed.