

LICENSEE EVENT REPORT

CONTROL BLOCK:

--	--	--	--	--	--	--

 ①

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	W	I	P	B	H	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

CON'T

REPORT SOURCE 0 1 7 8 L 6 0 5 0 0 0 2 6 6 7 0 5 0 2 7 9 3 0 5 2 1 7 9 9

60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During a review of an NRC mandate to place pressurizer level bistables
0 3 | in the tripped condition it was discovered that there was a remote
0 4 | possibility that this configuration could lead to simultaneous safety
0 5 | injection in both units and result in emergency Diesel overloading.
0 6 |
0 7 |
0 8 |

09		SYSTEM CODE E E		11	CAUSE CODE X		12	CAUSE SUBCODE Z		13	COMPONENT CODE G E N E R A					14	COMP. SUBCODE D		15	VALVE SUBCODE Z		16
7	8	9	10		11	12		13							18		19			20		
17		LER/RO REPORT NUMBER		EVENT YEAR 7 9		SEQUENTIAL REPORT NO. 0 0 8		OCCURRENCE CODE 0 1		REPORT TYPE T		REVISION NO. 0										
21	22	23	24	25	26	27	28	29	30	31	32											
ACTION TAKEN F		FUTURE ACTION Z		EFFECT ON PLANT Z		SHUTDOWN METHOD Z		HOURS 0 0 0 0		ATTACHMENT SUBMITTED Y		NPRD-4 FORM SUB. N										
33	34	35	36	37	38	39	40	41	42	43	44	45										
PRIME COMP. SUPPLIER N		COMPONENT MANUFACTURER W 1 2 0																				
46	47	48	49																			

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 To reduce the extremely remote possibility of a simultaneous safety
1 1 injection to probabilities consistent with plant design, the
1 2 pressurizer pressure logic and power supplies have been changed.
1 3
1 4

7 8 9 FACILITY STATUS 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 OTHER STATUS 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 METHOD OF DISCOVERY 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 DISCOVERY DESCRIPTION 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

ACTIVITY CONTENT
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35)
1 5 Z (33) N/A
7 8 9 10 11
44

LOCATION OF RELEASE (36)
N/A
45 80

PERSONNEL EXPOSURES

NUMBER		TYPE	DESCRIPTION
1	7	000	37 Z 38 N/A

PERSONNEL INJURIES		NUMBER		DESCRIPTION	
1	2	0	0	0	N/A

LOSS OF OR DAMAGE TO FACILITY (43)
TYPE DESCRIPTION
1 9 Z (42) N/A 2274 303

10
PUBLICITY
ISSUED DESCRIPTION (45)
2 0 N (44) N/A 7906060260 NRC USE ONLY

NAME OF PREPARER Sol Burstein

PHONE: 414/277-2121

NRC USE ONLY

7906060260.

May 21, 1979

ATTACHMENT TO LICENSEE EVENT REPORT 79-008/01T-0

Wisconsin Electric Power Company
Point Beach Nuclear Plant
Dockets 50-266 and 50-301

On May 2, 1979, we filed a 24-hour written notification which identified a possible, but unlikely, plant configuration and accident scenario that could lead to simultaneous safety injection in both units and result in the possibility of overloading the plant's Diesel generator during the sequencing phase. The simultaneous events needed in order to result in this condition were: a LOCA in one unit, loss of AC power to both units; and in the other unit, one of the safety injection actuation instrument channels which was powered by a DC battery through an inverter to be placed in a tripped condition due to either testing or failure. The affected unit initiates safety injection because of the accident and the unaffected unit receives a safety injection signal due to the loss of off-site AC power causing the instrument channels powered by AC to lose power and go to a tripped condition in combination with the DC-supplied instrument channel already in a tripped condition because of testing or failure. Although the probability of having all three of these situations occurring together is extremely remote, we determined to take appropriate action to avoid this condition, should any additional safety injection actuation instrumentation need to be placed in a tripped condition.

During our evaluation of this possible plant configuration, we were called by Mr. Trammell and other members of the NRC staff with an additional concern that the instrument channel powered by the battery could be assumed to be in a tripped condition as a result of the arbitrary single failure assumption made in accident analyses. This application of the single failure criterion to the unaffected unit was not used in the original design and safety evaluation of the plant, and we consider the non-mechanistic application of this criterion to the unaffected unit to be an inappropriate extension of this criterion.

We agreed, however, that the placing of an instrument channel supplied from a battery source in a tripped condition had a small, but finite, probability which could potentially result in safety injection actuation when the AC-supplied instrument channel tripped on loss of power. In order to avoid this remote possibility, we proposed a modification in our letter to the NRC dated May 7, 1979, which changed the power supply of the AC-supplied instruments in the safety injection actuation circuitry to a battery power source. Refer to attached Figure 1 for details of the modification.

2274 304

May 21, 1979

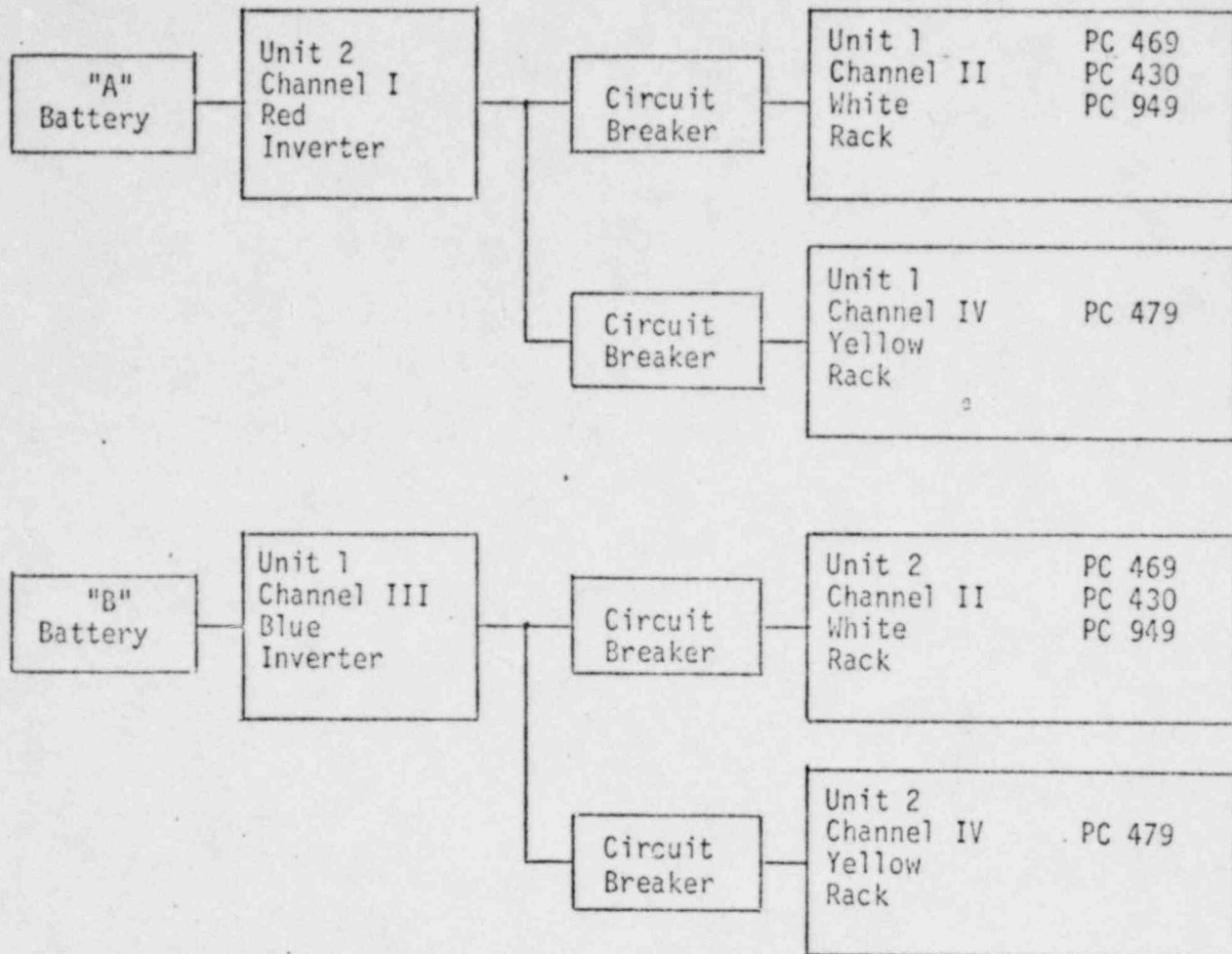
Following implementation of this modification, a loss of AC would not cause any safety injection actuation instrument to go to a tripped condition because the DC power supply would continue to power the instrument. A mechanistic single failure of an instrument, or having placed an instrument channel in a tripped condition due to testing or previous failure, would not cause safety injection actuation in the unaffected unit should loss of off-site AC power occur. No active single failure at the time of loss of off-site power will result in safety injection in the unaffected unit. We consider the probability of an instantaneous loss of a DC buss, at the time of an accident, coupled with loss of off-site power to both units or the probability of an instrument being in a tripped condition at the time of an accident in the other unit with a loss of off-site power to both units coupled with a single failure that makes up the remaining part of the safety injection actuation circuitry to be of such low probability that it need not be considered in the design of the plant.

The proposed modification to the power supplies for the safety injection actuation channels and the logic change to a two out of three pressurizer low pressure actuation of safety injection was approved by the NRC in a letter dated May 11, 1979. The two out of three pressurizer pressure modification was completed May 17, 1979, and the power supply changeover May 18, 1979. The final filing of this report was delayed a number of days to complete the modifications and enable us to close out the subject in this one report.

2274 05

FIGURE 1

PROPOSED MODIFICATION



The channel II and IV safety injection pressure circuits that are presently powered by plant AC will be powered from opposite unit inverters. The Unit 1 circuits will be on the "A" battery and the Unit 2 circuits will be on the "B" battery. These changes will involve four conduit runs and associated wiring from breaker panels to the analog racks. The additional wiring will be run to receptacles in the white and yellow analog racks. Circuits PC 469, PC 430, PC 949 and PC 479 will then be plugged into the newly wired receptacles.

2274 506