

FIRST OF TWO SHEETS
LICENSEE EVENT REPORT

CONTROL BLOCK: 0114101710

(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME				LICENSE NUMBER												LICENSE TYPE				EVENT TYPE				
01	M	I	B	R	P	1	0	0	-	0	0	0	0	0	-	0	0	4	1	1	-	1	0	1
7	8	9				14	15											25	26			30	31	32

REPORT TYPE		REPORT SOURCE		DOCKET NUMBER												EVENT DATE				REPORT DATE				
01	CONF		T	L	0	5	0	-	0	1	5	5	0	1	1	9	7	6	0	1	2	8	7	6
7	8				57	58												68	69			74	75	80

EVENT DESCRIPTION

02 During a review of Appendix J testing requirements, a vacuum instrument was identified
 03 as having inadequate design pressure rating. No redundant device is operable. Event
 04 similar to (1-75) Device valved out with procedural controls to return to service
 05 when needed. Replacement of device being investigated. *12/28/80*
 06

SYSTEM CODE		CAUSE CODE		COMPONENT CODE				PIPE COMPONENT SUPPLIER		COMPONENT MANUFACTURER				VIOLATION	
07	I	D	E	I	N	S	T	R	U	N	B	O	4	5	N
7	8	9	10	11	12	13	14	15	16	17	43	44	45	46	48

CAUSE DESCRIPTION

08 Bailey Meter Co pressure transmitter model BD1117A contains a diaphragm which may
 09 rupture if exposed to pressures greater than 10 psig. DBA pressure is 23 psig.
 10

FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION			
11	E	0	6	0	NA	Z		NA			
7	8	9	10	11	12	13	44	45	46		

FORM OF ACTIVITY RELEASED		CONTENT OF RELEASE		AMOUNT OF ACTIVITY		LOCATION OF RELEASE			
12	Z	Z		NA					
7	8	9	10	11	12	13	44	45	

PERSONNEL EXPOSURES

NUMBER		TYPE		DESCRIPTION	
13	0	0	0	Z	NA
7	8	9	11	12	13

PERSONNEL INJURIES

NUMBER		DESCRIPTION		
14	0	0	0	NA
7	8	9	11	12

PROBABLE CONSEQUENCES

15 Failure of the device would result in a loss of containment vacuum indication (contd)

LOSS OR DAMAGE TO FACILITY

TYPE		DESCRIPTION	
16	Z		NA
7	8	9	10

PUBLICITY

17 This report will be distributed to the Michigan media on transmittal to the NRC.

ADDITIONAL FACTORS

18 PROBABLE CONSEQUENCES (Contd) and would cause a small breach of containment

19 Integrity (1/4-inch pipe size)

GPO 881-447

14070

[PLEASE PRINT ALL REQUESTED INFORMATION]

EVENT DESCRIPTION

7 8 9 10 11 12 13 14 15 16 17 43 44 45 46 47 48

SYSTEM CODE CAUSE CODE COMPONENT CODE PRIME COMPONENT SUPPLIER COMPONENT MANUFACTURER VIOLATION

07 S D B I N S T R U N M 2 3 5 N

08 Mercoird pressure switches - DAW23-153(R-3A) and DAW533(R-2) are installed in the
7 8 9
09 containment pressure sensing lines. The set points of these switches will change
7 8 9
10 if they should be exposed to pressures anticipated during a DBA. 80

11	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																																																																																																											
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NUMBER			TYPE	DESCRIPTION
13	0	0	0	Z NA

NUMBER				DESCRIPTION
1	4	0	0	NA

15 | Switches (PS-664 thru 667)(DAW23-153) will still function to provide trip (contd)

TYPE		DESCRIPTION
13	2	NA
8	9	10

17 This report will be distributed to the Michigan media on transmittal to the NRC.

13 | PROBABLE CONSEQUENCES (Contd) signals to reactor protection system. Switches

19 DPS 9051 and 9052 (DAW533) may not function as designed and, therefore, are valved out.
7 8 9

To RBSewell, P21-107
FROM DEDeMoor, Big Rock/
GHPetitjean, Big Rock
DATE January 27, 1976
SUBJECT ADDENDUM TO LICENSEE EVENT REPORT
NUMBER T-1-76

14070

**Consumers
Power
Company**

INTERNAL
CORRESPONDENCE

RECEIVED

JAN 29 1976

CC R. B. DAWITT P21-115

NUCLEAR LICENSING

1. Analysis of Occurrence

- a. Pressure switches PS-664 through PS-667 sense containment pressure and operate at a pressure of 1.5 psig to initiate reactor scram and containment isolation. In a post Design Basis Accident (DBA) situation, these switches would experience loss of calibration and a change of setpoint; however, this deficiency would occur only after these switches had accomplished their safety-related function. For these switches (MERCROID DAW 23-153, R3A) damage results from a permanent deformation of the bourdon tube sensing element when exposed to sustained pressures greater than 20 psig. The containment pressure anticipated during a DBA is 23 psig.
- b. Pressure switch DPS 9051 opens the ventilation supply valve to provide a vent path when containment pressure falls into the vacuum region. Pressure switch DPS 9052 provides an alarm indication when containment pressure falls into the vacuum region. In a post DBA situation, both of these switches would lose calibration and experience a change in setpoint, such that they could not be relied upon to carry out their function should the containment go into vacuum during quenching with the enclosure spray system. These switches (MERCROID DAW 532, R2) experience damage identical to MERCROID DAW 23-153, R3A, except that damage is expected to occur at pressures greater than 15 psig.
- c. Pressure Transmitter PT-173 provides only a display signal; however, this signal is needed to permit operator backup action in the event of a failure of DPS 9051 and DPS 9052.

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- d. Note that if DPS 9051, DPS 9052 and PT-173 were all rendered inoperable, no indication of containment pressure under vacuum conditions would be available, nor would automatic containment vacuum relief capability be operable.

2. Immediate Corrective Action

The Plant Review Committee (PRC) concluded that since pressure switches PS-664 through 667 would still function to provide signals to the reactor protection system, continued reactor operation with these switches in service would not adversely affect public safety or health.

After a safety review of applicable portions of the FSAK and Technical Specifications, the PRC concluded that isolation of PT-173, DPS 9051 and 9052, with procedural requirements to return these instruments to service, should they be needed (and when containment pressure would be sufficiently low to prevent damage) was warranted, and would not adversely affect public safety or health. An Operations Memo was issued on 21 January 1976 to put these procedural controls into effect.

3. Permanent Corrective Action

Replacement of the instruments with instruments having proper pressure ratings is being pursued.

DED/GHP
1/27/76