

LICENSEE EVENT REPORT

CONTROL BLOCK: _____ ①

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01	M	D	C	C	N	2	2	0	0	-	0	0	0	0	0	0	-	0	0	3	4	1	1	1	1	4	5	
7	8	9	LICENSEE CODE				14	15	LICENSE NUMBER										25	26	LICENSE TYPE				30	57	CAT	58

CON'T

01	L	6	0	5	0	0	0	3	1	8	7	0	4	1	6	8	0	8	0	5	1	6	8	0	9
7	8	REPORT SOURCE			60	61	DOCKET NUMBER					68	69	EVENT DATE			74	75	REPORT DATE					80	

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

02 | AT 1045 WHILE 21 DIESEL GENERATOR WAS BEING TAKEN OFF 24 4 KV BUS FOLLOWING A

03 | TEST, STEAM GENERATOR ISOLATION SIGNAL (SGIS) B BLOCK PERMITTED, SGIS B BLOCKED

04 | AND LOCI SEQUENCER INITIATED WENT INTO ALARM. AN INVESTIGATION REVEALED THAT

05 | TWO 15 VDC POWER SUPPLIES HAD NO OUTPUT. THEY SUPPLY ESFAS LOGIC B CABINET

06 | SGIS/RAS/CRS/CSAS, LOCI AND SHUTDOWN SEQUENCER FUNCTIONS. (T.S. 3.3.2.1)

07 | THE 15 VDC POWER SUPPLIES WERE RESET AND ESFAS LOGIC B CABINET WAS RETURNED TO

08 | SERVICE AT 1340. LER 79-31 (U-1) DESCRIBES A SIMILAR EVENT.

09	I	B	X	Z	I	N	S	T	R	U	P	Z			
7	8	9	10	11	12	13	14	15	16	17	18	19	20		
SYSTEM CODE			CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE					COMP. SUBCODE		VALVE SUBCODE	

17	8	0	0	2	3	0	3	L	0					
7	8	9	21	22	23	24	25	26	27	28	29	30	31	32
LER/RC REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.				

X	X	Z	Z	0	0	0	0	Y	N	A	V	1	3	2				
7	8	9	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER		

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ⑳

10 | BOTH POWER SUPPLIES' OVERVOLTAGE PROTECTION MODULES HAD TRIPPED, REDUCING THEIR

11 | OUTPUTS TO NEAR '0' VDC. THE ALARMS DESCRIBED ABOVE WERE RECEIVED COINCIDENT

12 | WITH THE OPENING OF NO. 21 EMERGENCY DIESEL GENERATOR OUTPUT BREAKER WHICH WAS

13 | CARRYING INSIGNIFICANT LOAD AT THE TIME. A PROCEDURE IS BEING DEVELOPED TO

14 | TROUBLESHOOT THE PROBLEM.

15	F	1	0	0	NA	B	OPERATOR OBSERVATION						
7	8	9	10	11	12	13	14	15	16	17	18	19	20
FACILITY STATUS		% POWER			OTHER STATUS			METHOD OF DISCOVERY			DISCOVERY DESCRIPTION		

16	Z	Z	NA	NA									
7	8	9	10	11	12	13	14	15	16	17	18	19	20
ACTIVITY RELEASED		CONTENT		AMOUNT OF ACTIVITY			LOCATION OF RELEASE						

17	0	0	Z	NA									
7	8	9	10	11	12	13	14	15	16	17	18	19	20
PERSONNEL EXPOSURES		NUMBER		TYPE		DESCRIPTION							

18	0	0	NA										
7	8	9	10	11	12	13	14	15	16	17	18	19	20
PERSONNEL INJURIES		NUMBER		DESCRIPTION									

19	Z	NA											
7	8	9	10	11	12	13	14	15	16	17	18	19	20
LOSS OF OR DAMAGE TO FACILITY		TYPE											

20	N	NA												
7	8	9	10	11	12	13	14	15	16	17	18	19	20	
ISSUED		DESCRIPTION												

NAME OF PREPARER S. M. DAVIS/P. G. RIZZO

PHONE (301)269-4742/4726

NRC USE ONLY

LER NO. 80-23/3L
DOCKET NO. 50-318
EVENT DATE 04/16/80
REPORT DATE 05/16/80
ATTACHMENT

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS:

IMMEDIATELY AFTER RESETTING THE +15 VDC POWER SUPPLIES, THE OVERVOLTAGE PROTECTION TRIP POINTS WERE MEASURED AT +16.5 VDC. BOTH POWER SUPPLIES WERE FOUND TO BE OPERATING AT +15.1 VDC. AN OSCILLOSCOPE DISPLAYED NO NOISE OR AC RIPPLE ON EITHER OUTPUT.

THERE IS NO APPARENT REASON FOR A TRANSIENT ON A 4 KV VITAL BUS TO INDUCE A TRANSIENT WITHIN THE ESFAS CIRCUITRY. THE ESFAS IS POWERED BY VITAL INVERTERS, WHICH ARE IN TURN POWERED FROM VITAL BATTERIES; THEREFORE, A PROCEDURE IS BEING DEVELOPED FOR TROUBLESHOOTING THE APPARENT CAUSE AND EFFECT.

SINCE SUBMITTAL OF LER 79-31 (U-1), MEASUREMENTS BY INDUCING 4 KV TRANSIENTS WHILE MONITORING VARIOUS POINTS WITHIN THE VITAL POWER TRAIN MADE ON THE VITAL AC POWER TRAINS IN UNIT 1 HAVE REVEALED NO UNUSUAL DISTORTIONS NOR COMMON MODE NOISE PATTERNS. BENCH TESTS OF A REPRESENTATIVE ESFAS +15 VDC POWER SUPPLY REVEALED NO REGULATION PROBLEMS IN RESPONSE TO VARIATIONS IN SUPPLIED VOLTAGE OR FREQUENCY WITHIN ITS DESIGN SPECIFICATIONS.

FURTHER TESTING, EMPLOYING A NEWLY PROCURED TRANSIENT-RECORDING DEVICE IS EXPECTED TO BE COMPLETED BY JUNE 30, 1980.