

# LICENSEE EVENT REPORT

CONTROL BLOCK: 1

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	A	L	J	M	F	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		58	

  

L	6	0	5	0	0	0	3	4	8	7	0	7	2	8	8	1	3	0	9	0	2	3	1	9
REPORT SOURCE		DOCKET NUMBER										EVENT DATE					REPORT DATE							

**EVENT DESCRIPTION AND PROBABLE CONSEQUENCES** 10

0	2	At 1930 and 2320 on 7/28/81, while performing a one hour load run, diesel generator 1C																																																																														
0	3	was declared inoperable when it tripped under load. At 0050 on 7/30/81, while attempting																																																																														
0	4	to perform FNP-1-STP-28.1 (DG 1C Operability Test) DG 1C was again declared inoperable																																																																														
0	5	when it failed to start. Tech. Spec. 3.8.1.1, in part, requires DG 1C to be operable.																																																																														
0	6	Tech. Spec. 3.8.1.1, action statement requirements were met. Health/safety of the public																																																																														
0	7	was not affected.																																																																														
0	8																																																																															

0	9	E	E	11	E	12	B	13	E	N	G	I	N	E	14	Z	15	Z	16
SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE					COMP. SUBCODE		VALVE SUBCODE						

  

17	8	1	0	5	3	0	3	L	0
LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE	

  

A	18	Z	19	Z	20	Z	21	0	0	0	0	Y	23	N	24	A	25	F	0	1	0	26
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** 27

1	0	An investigation into the cause of the failure to start on 7/30/81 revealed that an "O"																																																																														
1	1	ring between the number 11 cylinder liner and cylinder had failed allowing water to enter																																																																														
1	2	the number 11 cylinder and overflow to several other cylinders via the intake air mani-																																																																														
1	3	fold. The water in the cylinders caused a "Hydraulic Lock" when the engine start was																																																																														
1	4	attempted. An extensive disassembly and inspection by the manufacturer and licensee																																																																														

1	5	E	28	1	0	0	29	NA	30	A	31	Operator Observation																																																																			
FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION																																																																							

  

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

  

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

  

1	8	0	0	0	40	NA																																																																			
PERSONNEL INJURIES		NUMBER		DESCRIPTION																																																																					

  

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

  

2	0	N	44	NA																																																																			
PUBLICITY ISSUED		DESCRIPTION																																																																					

8109090276 810902  
PDR ADOCK 05000348  
S PDR ER

W. G. Hairston, III

PHONE: (205) 899-5156

RC USE ONLY

LER 81-053/03L-0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (Continued):

personnel revealed that the "Hydraulic Lock" resulted in damage to the number 1 and 11 piston inserts and bushings, the lower thrust bearing and the vertical drive assembly. All damaged parts were replaced and as a further preventative measure, all cylinder liners (except number 10 which was replaced in May, 1981), upper and lower piston rings, upper piston inserts and additional miscellaneous parts were replaced to restore the engine to a reliable condition. As a result of the disassembly and inspection, the DG 1C trips experienced on 7-28-81 are believed to have been caused by high crankcase pressure due to possible flashing of water in the combustion chamber and/or lube oil sump which may have been precipitated by the "O" ring seal leak. The DG did, however, meet the operability acceptance criteria of FNP-1-STP-28.1 when started on 7-29-81 and was operable from 0015 on 7-29-81 until 0050 on 7-30-81.

Due to the magnitude of the work involved, the Tech. Spec. limit of 72 hours allowed for DG inoperability could not be met. A temporary Tech. Spec. change extending the total outage time to 9 days was granted by the NRC on 7-31-81. An additional 6 day extension was granted on 8-7-81. Following the completion of all necessary repairs and break-in testing, DG 1C was returned to service at 2143 on 8-13-81. A similar event was reported in LER 81-032/03L-0.

(NOTE: These incidents involve the fourth failure in the last 100 valid tests.)