

LICENSEE EVENT REPORT

CONTROL BLOCK: 

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 (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | L | L | S | C | 1 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 0 | 0 | 0 | 4 | 5  
7 8 14 15 25 26 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 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT 58

CON'T

REPORT SOURCE 01 DOCKET NUMBER 0500037137 EVENT DATE 082483 REPORT DATE 0906813

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES		CAUSE	EFFECT	COMP	VALVE
02	At 1430 on 8-24-83 with the unit in cold shutdown, the B RHR pump and B Shutdown				
03	Cooling (SC) heat exchanger were secured and the A RHR SC loop started. The A SC				
04	heat exchanger inlet temperature went to 207°F indicating an unintentional transfer				
05	from cold shutdown (Mode 4) to hot shutdown (Mode 3).				
06					
07					
08					

SYSTEM CODE C F 11		CAUSE CODE B 12		CAUSE SUBCODE A 13		COMP. SUBCODE Z 14				VALVE SUBCODE Z 15							
EVENT YEAR 8 3 22		SEQUENTIAL REPORT NO. 0 9 6 24		OCCURRENCE CODE 0 1 28		REPORT TYPE T 30		REVISION NO. 0 32									
ACTION TAKEN G 18		FUTURE ACTION F 19		EFFECT ON PLANT Z 20		SHUTDOWN METHOD Z 21		HOURS 0 0 0 0 22		ATTACHMENT SUBMITTED Y 23		NFRD-A FORM SUB. N 24		PRIME COMP. SUPPLIER Z 25		COMPONENT MANUFACTURER Z 9 9 9 26	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

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10	The cause of the event was the lack of adequate moderator temperature indication
11	for the conditions of no flow via RR and RT and the majority of the RHR SC flow
12	bypassing the RHR HX. A request for modification to install additional temperature
13	indication & procedure revs were corrective actions.

1 4 7 8 9  
FACILITY STATUS 10  
% POWER 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
B 28 0 0 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
ACTIVITY CONTENT 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
RELEASED OF RELEASE 51 52 53 54 55 56 57 58 59 60  
1 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
Z 33 Z 34 NA 35  
METHOD OF DISCOVERY 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
A 31 Observation 32  
DISCOVERY DESCRIPTION 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
LOCATION OF RELEASE 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50  
NA 36

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

PERSONNEL INJURIES		DESCRIPTION	
NUMBER			
1	2	3	4
0	0	0	40
NA			

7	8	9	11	12
		LOSS OF OR DAMAGE TO FACILITY	(43)	
		TYPE	DESCRIPTION	
		13		NA

7 8 9 10  
PUBLICITY (45)  
ISSUED DESCRIPTION (45)  
8309130075 830906  
PDR ADOCK 05000373  
S PDR  
NRC USE ONLY

2 0 N 44 58 69 80

NAME OF PREPARER M. A. Peters

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**Commonwealth Edison**  
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September 6, 1983

James G. Keppler  
Regional Administrator  
Region III  
U.S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Dear Sir:

Reportable Occurrence Report #83-096/01T-0 Docket #050-373 is being submitted to your office in accordance with LaSalle County Nuclear Power Station Technical Specification 6.6.B.1.b, Operation of the unit or affected systems when any parameter or operation subject to a limiting condition is less conservative than the least conservative aspect of the limiting condition for operation established in the technical specifications.

*CE Sargent*

*for* G. J. Diederich  
Superintendent  
LaSalle County Station

GJD/GW/rg

Enclosure

cc: Director of Inspection & Enforcement  
Director of Management Information & Program Control  
U. S. NRC Document Management Branch  
Inpo-Records Center  
File/NRC

SEP 8 1983

*1522*  
*11*

- I. LER NUMBER: 83-096/01T-0
- II. LASALLE COUNTY NUCLEAR STATION: Unit 1
- III. DOCKET NUMBER: 050-373
- IV. EVENT DESCRIPTION:

At 1430 on 8-24-83 with the unit in cold shutdown, the B RHR Pump and B Shutdown Cooling (SC) heat exchanger were shut down and the A RHR SC loop was started. The A SC heat exchanger inlet temperature went to 207°F indicating an unintentional transfer from cold shutdown (Mode 4) to hot shutdown (Mode 3).

V. PROBABLE CONSEQUENCES OF THE EVENT:

The operating staff was fully aware of the increasing trend of the RPV metal and coolant temperatures, but believed the coolant temperature to be less than 200°F due to limitations of the temperature indicating instruments (see Section VI Cause for Description of Limitations). The consequences of the event are in fact what happened:

The A RHR SC loop was started and returned the unit to cold shutdown. Since the RPV head vent was open, coolant temperatures could not exceed saturation temperatures (approximately 212°F at coolant surface, less than 260°F at RPV bottom). In the event there had been steam production, the reactor building equipment drain sump temperature indication and operation would have alerted the operating staff to the situation. It is believed from the above information and the data contained in Section VI, CAUSE, that there was no steam production and hence no uncontrolled release of radioactive material.

VI. CAUSE:

The cause of the event was the lack of adequate coolant temperature indication for the conditions of No Flow via RR and RT and the majority of the RHR SC flow bypassing the B RHR HX.

Between 1134 and 1427 the operating staff attempted at least three times to increase flow thru the B. RHR HX to mitigate the increasing coolant temperature by opening the B RHR HX discharge valve, 1E12-F003B. At each attempt the 1E12-F003B breaker tripped. The B RHR HX outlet temperature went from 139°F to 186°F during 1134 to 1427. The inlet to the B RHR HX temperature had approximately the same range between 1134 and 1427. The B RHR SC loop was using the A RR loop as source and discharging to the B RR loop during this time. At approximately 1427 the A RHR SC loop was started and the B RHR SC loop secured due to the inoperability of 1E12-F003B and the increasing coolant temperature. At approximately 1430 the A RHR HX inlet temperature exceeded 200°F (207°F). The temperature indications were verified by the instrument maintenance department (IMD). The RT bottom head drain had an indicated maximum temperature of 220°F

(IMD post calibration showed this recorder's indications to be 5°F high). Although RT was isolated outside containment, it is believed that the RHR SC Mode actually induced some flow through this line during the event.

The B RHR HX inlet temperature was not indicating an accurate coolant temperature due to the B RHR HX discharge valve, 1E12-F0038, being shut or only slightly open (the indicated coolant temperature could be lowered by the RHR service water effect on the temperature element).

The B RHR HX discharge temperature was not indicating an accurate coolant temperature since any coolant discharged from the HX would lower the combined bypass and discharge coolant temperature.

#### VII. CORRECTIVE ACTION:

Work Request L27039 was issued to repair the B RHR HX discharge valve/breaker.

Revision 8, dated 8-29-83, (Attached) was made to LOP-RH-07 to emphasize the precautions that should be noted when utilizing moderator temperature indications.

A request for modification, dated 9-1-83, was issued to install a temperature element/indicator/alarms for the RHR common suction line 1RH04C (Attached). (AIR 01-83-67067).

A meeting with the operating staff involved in the event was held 8-25-83.

AIR 01-83-67066 was issued to the operating staff to train on this subject event.

Prepared by: M. A. Peters