

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) LaSalle County Station Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 7 4 1 OF 0 3										PAGE 13	
TITLE (4) SBLC Concentration High																					
EVENT DATE (5)			LER NUMBER (6)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)											
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES					DOCKET NUMBER(S)							
0 8	2 3	8 5	8 5	0 4 0	0 0	0 9	2 0	8 5						0 5 0 0 0							
OPERATING MODE (3)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following: (11))																			
1		20.402(a)				20.406(a)				20.73(a)(2)(iv)				72.71(b)							
POWER LEVEL (10)		20.406(a)(1)(i)				20.36(a)(1)				X 20.73(a)(2)(v)				72.71(a)							
0 9 0		20.406(a)(1)(ii)				20.36(a)(2)				20.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 306A)							
		20.406(a)(1)(iii)				20.73(a)(2)(i)				20.73(a)(2)(viii)(A)											
		20.406(a)(1)(iv)				20.73(a)(2)(ii)				20.73(a)(2)(viii)(B)											
		20.406(a)(1)(v)				20.73(a)(2)(iii)				20.73(a)(2)(ix)											
LICENSEE CONTACT FOR THIS LER (12)														TELEPHONE NUMBER							
NAME Paul S. Watford, extension 323														AREA CODE		8 1 5 3 5 7 6 7 6 1					
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																					
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC											
C	BR	TKG	Q 8 2	N																	
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR					
YES (If yes, complete EXPECTED SUBMISSION DATE)												X NO									

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On August 23, 1985, at 1200 hours, the Unit 2 SBLC (BR) solution tank concentration was measured to be 14.7% by weight. Since there was no previous indication of a problem in this area, it was felt that another sample and analysis were required. A second sample was pulled and analyzed at 1545 hours and concentration was measured to be outside of Technical Specification 3.1.5 limits of 13.8% by weight. The Action Statement was entered and the Unit 2 SBLC system was logged in the Degraded Equipment Log. Two attempts at lowering tank concentration by adding water were unsuccessful. At 2300 hours, the SBLC system was declared inoperable. A unit shutdown and an Unusual Event were initiated. The Radiation Chemistry Department coordinated efforts with the Operating Department to bring the solution tank concentration within the Technical Specification limits. At 0510 hours on August 24, 1985, the SBLC system was returned to operable status and the Unusual Event was terminated.

The cause of the occurrence was water evaporation from the tank. Adequate sodium pentaborate was available in the SBLC solution tank to bring the Unit 2 reactor from rated power to Cold Shutdown.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3180-0104  
EXPIRES 8/31/85

FACILITY NAME (1):  LaSalle County STation Unit 2	DOCKET NUMBER (2):  05000374	LER NUMBER (8):			PAGE (3):		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		85	040	00	02	OF	03

TEXT (If more space is required, use additional NRC Form 366A's) (17)

I. EVENT DESCRIPTION

On August 23, 1985, at 1200 hours, a SBLC (BR) concentration sample from the Unit 2 SBLC solution tank was measured to be 14.7% by weight. Since there was no previous history of high SBLC concentration it was felt that another sample and analysis were required. In addition, the tank level was noted to be low. 420 gallons of clean condensate were added to the SBLC tank and at 1545 hours, concentration was once again measured to be outside of Technical Specification limits at 14.15% by weight. The Action Statement of Technical Specification 3.1.5 for Standby Liquid Control was entered and the Unit 2 Standby Liquid Control system was logged in the Degraded Equipment Log. Another attempt at lowering tank concentration by adding 100 gallons of water was initiated at 2030 hours. At 2241 hours, a new sample was taken and found to still be outside of the Technical Specification limits at 14.2% by weight.

At 2300 hours, the SBLC system was declared inoperable and an Unusual Event was declared. Steps were initiated to place Unit 2 in Hot Shutdown concurrent with attempts to lower SBLC tank concentration.

At this time about 400 gallons of solution was drained from the tank and 240 gallons of makeup water was added.

At 0454 hours on August 24, 1985, the SBLC tank concentration was determined to be within the limits of Technical Specification based on a sample taken at 0354 hours.

At 0510 hours, the SBLC system was returned to operable status and the Unusual Event concluded.

II. CAUSE

The cause of the occurrence was water evaporation from the SBLC solution tank.

III. PROBABLE CONSEQUENCES OF THE EVENT

At all times, adequate sodium pentaborate in solution was available in the SBLC solution tank to bring the Unit 2 reactor from rated power to Cold Shutdown. The SBLC solution temperature and concentration requirements were always in the acceptable operating range as required by Technical Specifications 3.1.5 Figure 3.1.5-1 and no potential of solution crystallization existed. All auxiliary equipment was available and operable. This event did not compromise the ability for safe shutdown of Unit 2.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104  
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
LaSalle County Station Unit 2	0500037485	04	0	00	03	OF	03

TEXT (If more space is required, use additional NRC Form 306A's) (17)

IV. CORRECTIVE ACTION

At 1300 hours a Station Chemist recommended, based on calculations, draining 165 gallons from the SBLC solution tank and adding 485 gallons of clean condensate to reach a final SBLC concentration of 13.5% by weight and a level of 4900 gallons.

After discussion between the Chemist and the Operating Shift Foreman at 1545 hours, it was decided instead to add 420 gallons of clean condensate in order to conserve time and minimize waste inventory. Since there was no history of high SBLC concentration and the previous surveillance showed a 13.2% by weight concentration it was expected that adding water would bring the SBLC solution tank into specification.

The SBLC tank was sparged for two hours as required by approved procedure LCP-830-9, "Determination of Minimum Air Sparge for Uniform Mixing of Standby Control Solution Tank", and another sample was pulled at 1745 hours for chemical analysis. SBLC concentration remained high, outside of specifications, and an additional one hundred gallons of clean condensate water was added at 2030 hours. The tank was sparged for 2 hours with increased airflow and another sample was pulled and analyzed at 2200 hours. At 2241 hours, the sample analysis showed the concentration to be still outside of Technical Specifications at 14.2% by weight.

The Rad/Chem Department was requested to perform another calculation to determine the amount of SBLC solution to be drained and clean condensate water to be added in order to bring the concentration and volume in the SBLC solution tank back into Technical Specification limits. From 0130 to 0240 hours on August 24, 1985, 400 gallons of solution were drained from the SBLC tank and 260 additional gallons of clean condensate was added. A two hour air sparge commenced at 0245 hours. The SBLC solution tank concentration was determined to be within specification at 12.8% by weight at 0454 hours. At 0510 hours, the SBLC system was declared operable.

To prevent future delays in bringing the Sodium Pentaborate concentration into specified ranges, Operating Shift Supervisors and Chemists will be trained for doing a critical review of analytical results to determine whether a resample is required or a tank volume/concentration adjustment should be made. In addition, management will supervise any volume/concentration adjustment made to the SBLC tank. This will be tracked by AIR 374-200-85-09900.

V. PREVIOUS OCCURRENCES

None.

VI. NAME AND TELEPHONE NUMBER OF PREPARER

Paul S. Watford, 815/357-6761, extension 323.



**Commonwealth Edison**  
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Telephone 815/357-6761

September 20, 1985

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Dear Sir:

Reportable Occurrence Report #85-040-00, Docket #050-374 is being submitted to your office in accordance with 10CFR 50.73.

*for R.D. Bishop*  
G. J. Diederich  
Station Manager  
LaSalle County Station

GJD/DRR/kg

Enclosure

xc: NRC, Regional Director  
INPO-Records Center  
File/NRC

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