

Commonwealth Edison Company
Byron Generating Station
4450 North German Church Road
Byron, IL 61010-9794
Tel 815-234-5441

ComEd

December 11, 1995

LTR: BYRON 95-0394
FILE: 3.03.0800 (1.10.0101)

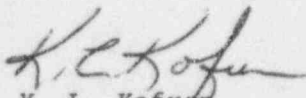
U.S. Nuclear Regulatory Commission
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Washington, D.C. 20555

Dear Sir:

The Enclosed Licensee Event Report from Byron Generating Station is being transmitted to you in accordance with the requirements of 10CFR50.73 (a) (2) (i) (B).

This report is number 95-010; Docket No. 50-454.

Sincerely,



K. L. Kofron
Station Manager
Byron Nuclear Power Station

KLK/WD/ld

Enclosure: Licensee Event Report No. 95-010

cc: H. J. Miller, NRC Region III Administrator
NRC Senior Resident Inspector
INPO Record Center
ComEd Distribution List

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SIGNATURE PAGE FOR LICENSEE EVENT REPORT

LER Number
454:95-010

Title of Event: Chemistry Sample Was Not Representative Due to Closed Valve

Occurred: 11-13-95 / 0100
Date Time

Licensee Contact: R. Choinard

OSR DISCIPLINES REQUIRED: ABG

9/13 / 12/13/95
SES DATE

Acceptance by Station Review:

W. Walk / ABG / 12/3/95
OE Disciplines Date

C. J. Jay / AG / 12/1/95
SES Disciplines Date

D. Parrell / ABG / 12/7/95
RAS Disciplines Date

E. P. Kelly / _____ / 12/7/95
Other Disciplines Date

Bill Kelly / ADE / 12-8-95
Other Disciplines Date

Approved by: K. C. Kofun / 12/12/95
Station Manager Date

NRC FORM 366 (2-95)		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB NO. 3150-0104 EXPIRES 04/30/98						
LICENSEE EVENT REPORT (LER)											
(See reverse for required number of digits/characters for each block)											
FACILITY NAME (1)					DOCKET NUMBER (2)			PAGE (3)			
BYRON NUCLEAR POWER STATION					05000454			1 OF 5			
TITLE (4)											
CHEMISTRY SAMPLE WAS NOT REPRESENTATIVE DUE TO CLOSED VALVE											
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 NAME	DOCKET NUMBER	
11	13	95	95	010	00					05000	
OPERATING MODE (9)		5		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)							
POWER LEVEL (10)		0		20.2201(b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/>	50.73(a)(2)(i)(B)	50.73(a)(2)(viii)	
				20.2203(a)(1)		20.2203(a)(3)(i)			50.73(a)(2)(ii)	50.73(a)(2)(x)	
				20.2203(a)(2)(i)		20.2203(a)(3)(ii)			50.73(a)(2)(iii)	73.71	
				20.2203(a)(2)(ii)		20.2203(a)(4)			50.73(a)(2)(iv)	OTHER	
				20.2203(a)(2)(iii)		50.36(c)(1)			50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A	
				20.2203(a)(2)(iv)		50.36(c)(2)			50.73(a)(2)(vii)		
LICENSEE CONTACT FOR THIS LER (12)											
NAME					TELEPHONE NUMBER (Include Area Code)						
Raymond F. Choinard, extension 2041					815-234-5441						
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
	GW										
SUPPLEMENTAL REPORT EXPECTED (14)											
YES (If yes, complete EXPECTED SUBMISSION DATE).					<input checked="" type="checkbox"/> NO		EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On November 13, 1995, at 0230, a chemistry sample for Limiting Condition for Operation Action Requirement (LCOAR) for Technical Specification 3.3.3.10 was not done within the specified time limit. The action requirement required a sample for explosive mixtures at least once per 24 hours.

The cause of this event was a de-energized closed valve. It was indeterminate whether the circuit breaker for the valve tripped due to a ground or if it was opened during troubleshooting activities.

The circuit breaker was closed and the sample was taken. The results indicated that the LCOAR requirement was met. This event will be reviewed by the Electrical Maintenance and Operations Department.

This event is reportable in accordance with 10CFR 50.73(a)(2)(i)(B) as operation prohibited by Technical Specifications.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
BYRON NUCLEAR POWER STATION	05000454	95	-- 010	-- 00	2 OF 5

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

A. PLANT CONDITIONS PRIOR TO EVENT:

Event Date/Time 11-13-95 / 0230

Unit 1 Mode 5 - Cold Shutdown Rx Power 0% RCS [AB] Temperature/Pressure 98° F/Atmospheric

Unit 2 Mode 1 - Power Operations Rx Power 99% RCS [AB] Temperature/Pressure NOT/NOP

B. DESCRIPTION OF EVENT:

Prior to this event, the Waste Gas Analyzer (OGW01J)[WE] was in a Limiting Condition for Operation Action (LCOAR) due to annunciator problems. The analyzer contains the Hydrogen analyzer, OAT-GW8000, and the Oxygen analyzer, OAT-GW8003. Both of these analyzers were inoperable. The analyzer had been in LCOAR since November 7, 1995. The LCOAR required an explosive gas sample at least once per twenty-four hours. Chemistry had taken a sample at 0230 on November 12, 1995. The next sample was due by 0230 on November 13, 1995.

As part of the scheduled outage activities, non-safety-related-AC-bus 143 [EB] was Out-of-Service (OOS). Operations Department took the bus OOS at approximately 0400 on November 12, 1995. This bus supplies power to the Waste Gas Analyzer. When AC power was taken OOS, power to the Waste Gas Analyzer (WGA) annunciators automatically switched to DC power. The remainder of the analyzer remained without power. At the time bus 143 was taken OOS, the Waste Gas Compressor Discharge Oxygen analyzer (OAIT-GW0004) in panel OGW03J was declared inoperable and placed into its LCOAR. The LCOAR required an explosive gas sample at least once per twenty-four hours.

On November 12, 1995, at 0445, Operations received a DC ground alarm in the Main Control Room. Operations initiated an Action Request (AR) to investigate and repair the ground. The AR was turned into Work Request (WR) #950109006 and assigned to the Electrical Maintenance Department for resolution. The instructions on the WR said to identify and locate the DC grounds. WRs to repair the equipment would be written once the grounds were found.

Two Electrical Maintenance (EM)(Non-licensed) electricians and a member from the Operational Analysis Department (OAD) (Non-Licensed) were assigned to the work request. They began trouble shooting the ground on November 12, 1995 sometime before noon.

During troubleshooting the WGA, a ground in the annunciator was found and documented on the work package.

**LICENSEE EVENT REPORT (LER)
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BYRON NUCLEAR POWER STATION	05000454	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 5
		95	-- 010	-- 00	

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

B. DESCRIPTION OF EVENT: (cont.)

At 1915, there was a shift briefing. During the briefing, the Shift Engineer (SE) (SRO Licensed) said bus 143 was about to be Returned-To-Service (RTS). A Chemistry Technician (Non-licensed) told the Shift Control Room Engineer (SCRE) (SRO Licensed) that his turnover said temporary power would be connected to the Waste Gas Analyzer at 2000.

Throughout the night, there were discussions between the chemistry technician, Operations and Electrical Maintenance personnel, and Chemistry Supervision. Since the RTS of bus 143 was close-at-hand and the sample due time was 0230, the SE did not authorize installation of temporary power. He did this to save the time and effort this activity would take.

The RTS of bus 143 was done at about 0025 on November 13, 1995. The SE called the Chemistry Technician and informed him that he could take his samples.

At about 0100, the technician took his first sample. About one-half hour later he had the results. The results were acceptable, but different enough from the previous day that the technician was suspect of the results. He took another sample and analyzed it. The results were the same.

At 0440, the technician notified the SE, Radwaste Supervisor, and Chemistry Lab Supervisor of suspect results.

At 0745, on November 13, Chemistry contacted the System Engineer and Radwaste Supervisor for the Waste Gas system and asked for assistance in determining the cause of the suspect sample. At 0910, the System Engineer called Chemistry and told them the sample valve OGW9340C was found closed and the associated breaker was not closed. This breaker supplies DC power to twelve solenoid valves and three relays and the Waste Gas Compressor Discharge Oxygen analyzer (OAIT-GW0004) in panel OGW03J. One valve this breaker supplies power to is valve OGW9340C, "AOV Isolation Valve from Gas Decay Tanks to Inlet Header of Auto Gas Analyzer." This valve is needed to sample the Gas Decay Tanks. Operations restored the breaker and Chemistry resampled for explosive mixtures. The results were acceptable.

The technician did not know that the circuit breaker for valve OGW9340C was not closed. This disabled the solenoid valve which was needed to take the sample for explosive gases.

This event is reportable in accordance with 10CFR 50.73(a)(2)(i)(B) as operation prohibited by Technical Specifications.

C. CAUSE OF EVENT:

The cause of this event was a closed valve (OGW9340C) which was needed to take the explosive mixture sample. The valve was closed because there was no power to it due to CB-2 not being closed.

It was indeterminate whether the circuit breaker tripped open due to the ground or was manually opened during troubleshooting activities. Troubleshooting team was interviewed, and they indicated they could not recall opening the breaker and if so, they would have documented on the alterations log.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
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		95	-- 010	-- 00	

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

D. SAFETY ANALYSIS:

The impact on safety was negligible. The sample required by Technical Specifications was taken about seven hours past the required time limit. The results of the late sample indicated there was no explosive mixture and Technical Specification requirements were met.

E. CORRECTIVE ACTIONS:

1. The immediate corrective actions were to close circuit breaker 2, take a sample and analyze it for explosive mixture. The ground in the Waste Gas Analyzer was repaired.
2. The event will be discussed with the Electrical Maintenance Department. During the discussion, it will be stressed that alterations to equipment will be logged in the Maintenance Alterations Log. NTS item 454-180-95-0010-01 will track this action.
3. The event will be discussed with the Operations Department. During the discussion, it will be stressed that alteration to equipment will be logged in the Abnormal Lineup Log. NTS item 454-180-95-0010-02 will track this action.

F. RECURRING EVENTS SEARCH AND ANALYSIS:

a. PIRs, LERs

There was one previous event involving the Waste Gas Analyzer.

PIR 6-1-93-003, "Mispositioned Valve on Waste Gas Analyzer OGW8000/8003." Instrument Maintenance personnel left a valve in a throttle position.

b. NWRs

950073975 - provide temporary power to the Waste Gas Analyzer.
 950109006 - identify and locate 125 VDC ground.

c. Industry

No industry events were found during a search for similar events.

G. COMPONENT FAILURE DATA:

None.