

LICENSEE EVENT REPORT (LER)

Facility Name (1) Byron, Unit 1	Docket Number (2) 0 5 0 0 0 4 5 1	Page (3) 1 of 0 3
------------------------------------	--	----------------------------

Title (4) CONTROL ROOM VENTILATION ACTUATION DUE TO MAIN CONTROL ROOM OUTSIDE AIR INTAKE B
PROCESS RADIATION MONITOR GAS CHANNEL SPIKE FROM UNKNOWN CAUSE

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 2	0 9	8 8	8 8	0 0 1	0 0	0 3	0 3	8 8	BYRON, UNIT 2	0 5 0 0 0 4 5 5	

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)									
POWER LEVEL (10) 0 9 8	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)						
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)						
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)							

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
Name Fred Hornbeak, Senior Staff Engineer	Ext. 2822	AREA CODE 8 1 5	2 3 4 - 5 4 4 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)										
CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS

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 February 9, 1988, at 0103 with both Byron units in power operation (Mode 1), there was a spike on the process radiation monitor for the Main Control Room Outside Air Intake. This spike caused an automatic transfer of the main control room ventilation system to its Engineered Safety Features (ESF) configuration. Samples were taken and no actual radioactivity was found. Following troubleshooting and monitoring of the system, the cause of the spike was deemed indeterminable and the ventilation system was returned to the normal operating mode. There have been other noise spike induced ventilation system actuations at Byron Station.

IE22

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
		Year	///	Sequential Number	///	Revision Number				
Byron, Unit 1	0 5 0 0 0 4 5 4	8 8	-	0 0 1	-	0 0	0 2	OF	0 3	

TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [xx]

A. PLANT CONDITIONS PRIOR TO EVENT:

Event Date/Time 2-5-88 / 0103

Unit 1 MODE 1 - Power Operation Rx Power 98% RCS [AB] Temperature/Pressure Normal Operating

Unit 2 MODE 1 - Power Operation Rx Power 80% RCS [AB] Temperature/Pressure Normal Operating

B. DESCRIPTION OF EVENT:

On February 9, 1988, at 0103 with Byron Unit 1 in power operation (Mode 1) at 98% reactor power and Byron Unit 2 in power operation (Mode 1) at 80% reactor power, process radiation monitor OPR33J (Main Control Room Outside Air Intake 'B') (PR) [IL] alarmed CHANNEL IN HIGH ALARM on the main control room radiation monitoring display console. This alarm was due to a spike on the gas channel. The spike also caused an interlock signal which automatically transferred the main control room ventilation system (VC) [VI] to it's Engineered Safety Features (ESF) configuration. Radiation Chemistry pulled a grab sample which verified no radiation was present. No plant systems or components were previously inoperable that contributed to this event. The plant was maintained in a stable condition during this event. All operator actions taken were correct. This event is reportable per 10CFR50.73(a)(2)(iv).

C. CAUSE OF EVENT:

The cause of the gas channel spike on process radiation monitor OPR33J is unknown. It was determined from the duration of the spike that the spike was probably electronically induced noise. A strip chart recorder was connected to process radiation monitors OPR33J and OPR34J to monitor the 120VAC supply voltage and the gas detector high voltage power supply on each monitor. This was done to aid in determining the cause of the spike. No cause was found, and the cause has been deemed indeterminable. There was no personnel error involved in this event.

D. SAFETY ANALYSIS:

There was no affect on plant and public safety. The transfer of the Main Control Room Ventilation System to the makeup mode of operation is an ESF actuation. The actuation establishes a safer plant condition by allowing for the filtering of radioactive contamination from the air that is supplied to the main control room. At no time was the filtering capability required since no airborne activity existed during this event.

E. CORRECTIVE ACTIONS:

The Instrument Maintenance Department visually inspected the detector connectors and connected the strip chart recorder to OPR33J and OPR34J. The monitors did not spike while the strip chart recorder was connected and observation of the trend displays on the radiation monitoring display console revealed steady trends. The strip chart recorder was disconnected on February 18, 1988, and the VC system was returned to its normal operating configuration. No further corrective actions are warrented at this time.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				Page (3)	
		Year	Sequential Number	Revision Number			
Byron, Unit 1	0 5 0 0 0 4 5 4	8 8	- 0 0 1	- 0 0	0 3	OF 0 3	

TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [xx]

F. PREVIOUS OCCURRENCES:

The following LER's detailed previous control room ventilation actuations due to spikes on radiation monitors. This large number of events in 1984, 1985 and 1986 was attributed to construction activities in the plant. Construction activities have now ended and noise suppression circuitry has been added to the radiation monitors, thus reducing the number of spurious ventilation actuations.

LER NUMBER

84-027-00
 84-028-00
 84-033-00
 84-038-00
 85-010-00
 85-088-01
 85-099-01
 86-002-01
 86-007-01
 86-024-00

G. COMPONENT FAILURE DATA:

a)	<u>MANUFACTURER</u>	<u>NOMENCLATURE</u>	<u>MODEL NUMBER</u>	<u>MFG PART NUMBER</u>
	Not Applicable			

b)	<u>RESULTS OF NPRDS SEARCH:</u>
	Not Applicable



Commonwealth Edison
Byron Nuclear Station
4450 North German Church Road
Byron, Illinois 61010

DATE: March 3, 1988

LTR: BYRON 88-0199

U. S. Nuclear Regulatory Commission
Document Control Desk
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)(iv).

This report is number 88-001-00; Docket No. 50-454.

Very truly yours,

R. Pleniewicz
Station Manager
Byron Nuclear Power Station

RP/bb (1921M/0206M)

Enclosure: Licensee Event Report No. 88-001-00

cc: A. Bert Davis, NRC Region III Administrator
P. Brochman, NRC Senior Resident Inspector
INPO Record Center
CECo Distribution List

IE22
11