

LICENSEE EVENT REPORT (LER)

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

Title (4) CONTROL ROOM VENTILATION ACTUATION DUE TO HIGH VACUUM ALARM ON OPR34J RADIATION MONITOR

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 3	2 4	8 6	8 6	0 1 1 1	0 0	0 4	1 4	8 6	NONE	0 5 0 0 0 1 1

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 7	20.402(b)	20.405(c)	X	50.73(a)(2)(iv)	73.71(b)	
	20.405(a)(1)(i)	50.36(c)(1)		50.73(a)(2)(v)	73.71(c)	
	20.405(a)(1)(ii)	50.36(c)(2)		50.73(a)(2)(vii)	Other (Specify in Abstract below and in Text)	
	20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		
	20.405(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		
	20.405(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

Name F. Hornbeak, Technical Staff Supervisor, Ext. 2243 TELEPHONE NUMBER 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	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
X	I L	M O N	G O 6 3	N					

SUPPLEMENTAL REPORT EXPECTED (14)

X Yes (If yes, complete EXPECTED SUBMISSION DATE) 1 0 0 1 8 6 Expected Submission Date (15) Month Day Year

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

On March 24, 1986 at 1332 with the plant in power operation (Mode 1) the Main Control Room Outside Air Intake 'B' Process Radiation Monitor (OPR34J) went into the interlock mode due to a high vacuum alarm caused by a clogged sample particulate filter. This automatically transferred the Main Control Room Ventilation System to its Engineered Safety Features configuration. Radiation Chemistry Technicians replaced the filters and the monitor was returned to service. The Unit 2 Auxiliary Feedwater (AF) Diesel had been started at 0837 and the exhaust was drawn into the Main Control Room Ventilation System. The sample drawn by the OPR34J eventually clogged the particulate filter and caused a high vacuum alarm. The inlet lines of all Main Control Room Outside Air Intake radiation monitors will be flushed and a revision will be made to the AF diesel starting procedure to place the Control Room Ventilation System in the makeup mode prior to starting the diesel. A modification may also be made to the AF diesel exhaust stacks. A supplemental report will be submitted when corrective actions are finalized.

8604220231 860414
PDR ADOCK 05000454
S PDR

IE22
11

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 6	- 0 1 1	-	0 0	0 2	OF	0 3

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

A. PLANT CONDITIONS PRIOR TO EVENT:

MODE 1 - Power Operation Rx Power 97% RCS [AB] Temperature/Pressure Normal Operating

B. DESCRIPTION OF EVENT:

On March 24, 1986 at 1332 with the plant in power operation (Mode 1) at 97% reactor power, the Main Control Room Outside Air Intake 'B' Process Radiation Monitor (OPR34J) [IL] went into the interlock mode due to a high vacuum alarm caused by a clogged sample particulate filter. The interlock signal caused a Main Control Room alarm annunciation and automatically transferred the Main Control Room Ventilation System [VI] to its Engineered Safety Features (ESF) configuration. Operators verified the proper ESF Main Control Room Ventilation System lineup and directed Radiation Chemistry Technicians (RCT's) to change the filters on the monitor. The filters were changed and the monitor was restarted and returned to service. Operator actions were correct and did not place the plant in an unsafe condition. There were no other systems or components that were inoperable at the beginning of this event that contributed to this event. There also was no effect on the operation of the plant from this event. This event is reportable per 10CFR50.73(a)(2)(iv).

C. CAUSE OF EVENT:

The interlock signal was due to a monitor high vacuum alarm caused by a clogged sample particulate filter. An initial examination of the particulate filter indicated abnormal deposition of particulate due to a charcoal black color rather than the expected brown color indicative of a dirty filter. The redundant radiation monitor (OPR33J) on the ventilation train was checked and the sample particulate filter exhibited the same characteristics. A review of the operating logs indicated that the Unit 2 Auxiliary Feedwater Diesel Driven Pump (AF) [BA] was started at 0837 on March 24, 1986 and run past the time of the ESF actuation. Technical Staff personnel checked the locations of the Unit 2 AF diesel exhaust stack and the Main Control Room Ventilation System air intakes on the Auxiliary Building roof. The Main Control Room air intakes are located approximately 40 feet north and 50 feet below the AF diesel exhaust stack. The clogged particulate filter and a swipe of the AF diesel exhaust stack were then sent to a laboratory for chemical analysis. The analysis confirmed that the AF diesel exhaust was drawn into the Main Control Room Ventilation System and the sample drawn by the monitor eventually clogged the filter and shutdown the monitor.

D. SAFETY ANALYSIS:

There was no effect on plant or public safety. The transfer of the Main Control Room Ventilation System to the makeup mode of operation is an ESF actuation which establishes a safer plant condition by filtering radioactive contamination from the air supplied to the Main Control Room. At no time was the filtering capability required since no airborne activity existed during this event. The redundant monitor (OPR33J) on this Main Control Room Ventilation train was operable throughout this event and showed no increase in activity levels.

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 6	- 0 1 1	- 0 0	0 3	OF	0 3

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

E. CORRECTIVE ACTIONS:

RCT's changed the filters on both process radiation monitors (OPR33J and OPR34J) on train B of Control Room Ventilation System and returned the monitors to service. The inlet lines of all Main Control Room Outside Air Intake Radiation Monitors (OPR31J, OPR32J, OPR33J and OPR34J) will be flushed (with instrument or station air) to remove any residual soot or dirt accumulation. A procedure revision requiring that the Main Control Room Ventilation System be placed in the makeup mode will be made to the Unit 1 and Unit 2 AF diesel starting procedures. The Unit 1 and Unit 2 AF diesel exhaust stacks may also be modified to prevent recurrence of this event. Changes are being made to both units because the exhaust stacks are located approximately 3 feet apart. Action Item Record (AIR) 6-86-100 tracks any possible modifications and procedure revisions. A supplemental report will be submitted to report corrective actions determined.

F. PREVIOUS OCCURRENCES:

<u>LER NUMBER</u>	<u>TITLE</u>
NONE	

G. COMPONENT FAILURE DATA:

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



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

April 14, 1986

LTR: BYRON 86-0382

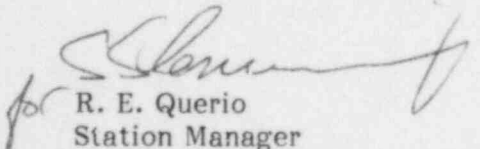
U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

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) which requires a 30 day written report.

This report is number 86-011-00; Docket No. 50-454.

Very truly yours,


for R. E. Querio
Station Manager
Byron Nuclear Power Station

REQ/RP/bf

Enclosure: Licensee Event Report No. 86-011-00

cc: J. G. Keppler, NRC Region III Administrator
J. Hinds, NRC Resident Inspector
INPO Record Center
CECO Distribution List

#3/017

IE22
11