

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) BYRON, UNIT 1	DOCKET NUMBER (2) 0 5 0 0 0 4 5 4	PAGE(S) 1 OF 2
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TITLE (4)  
CONTROL ROOM VENTILATION ISOLATION

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	1	1	8	5	0	0	1	2			0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9) 3	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) 0 1 0 0	<input type="checkbox"/> 20.407(b)	<input type="checkbox"/> 20.408(a)	<input checked="" type="checkbox"/> 80.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.408(a)(1)(i)	<input type="checkbox"/> 80.36(a)(1)	<input type="checkbox"/> 80.73(a)(2)(v)	<input type="checkbox"/> 73.71(a)						
	<input type="checkbox"/> 20.408(a)(1)(ii)	<input type="checkbox"/> 80.36(a)(2)	<input type="checkbox"/> 80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)						
	<input type="checkbox"/> 20.408(a)(1)(iii)	<input type="checkbox"/> 80.73(a)(2)(i)	<input type="checkbox"/> 80.73(a)(2)(vii)(A)							
	<input type="checkbox"/> 20.408(a)(1)(iv)	<input type="checkbox"/> 80.73(a)(2)(ii)	<input type="checkbox"/> 80.73(a)(2)(vii)(B)							
<input type="checkbox"/> 20.408(a)(1)(v)	<input type="checkbox"/> 80.73(a)(2)(iii)	<input type="checkbox"/> 80.73(a)(2)(v)								

LICENSEE CONTACT FOR THIS LER (12)

NAME Rick Hildebrand, System Test Engineer, Ext. 250	TELEPHONE NUMBER AREA CODE: 8 1 5 2 3 4 1 - 1 5 4 1 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
C	IIL	/ / / / /	G1016 B	N					

SUPPLEMENTAL REPORT EXPECTED (14)

<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
			0	5	0 9 8 6

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

Radiation monitors OPR33J and OPR34J (Main Control Room Outside Air Intake 'B'), 1RT-ARO12 (Containment Fuel Handling Building Accident Monitor), and ORT-ARO56 (Fuel Handling Building Accident Monitor) went into interlock condition due to a voltage transient caused by starting the 1B circulating water pump. This caused the B Train of Main Control Room HVAC to shift to it's ESF configuration. The Corporate Engineering group is investigating solutions for preventing such voltage transients.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  BYRON, UNIT 1	DOCKET NUMBER (2)  0 5 0 0 0 4 5 4	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 5	— 0 0 7	— 0 0	0 2	OF 0 2

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

On January 9, 1985, at 0952 with the plant in Mode 4 and on January 11, 1985 at 0819, with the plant operating in Mode 3, radiation monitors 1RT-AR012 (Containment Fuel Handling Accident Monitor), ORT-AR056 (Fuel Handling Building Accident Monitor), OPR33J and OPR34J (Main Control Room Outside Air Intake 'B') went into interlock condition due to the voltage transient caused by the startup of the 1B circulating water pump, 1CWO1PB, a 7000 hp, 4KV synchronous motor. This scenario has been verified by recreating the event. Using stripchart recorders, it was determined that a 20 volt drop, 115 volt to 95 volt, occurs. This caused the K-1 relay at the RM-80, the radiation monitoring system microprocessor, to dropout. When this relay drops out, the Control Room Ventilation shifts to the makeup mode. The reason there is a Power Fail function (line voltage less than 100 volts AC) for the RM-80 microprocessor is to allow the data base to be transferred to battery protected storage prior to the complete loss of AC voltage. Upon restoration of power, an interlock signal is generated. After the RM-80 reconfigures itself, it senses line voltage greater than 105 volts and clears the interlock condition.

Plant and public safety were not affected since the ESF function shifts the Control Room Ventilation to a safer lineup.

There has been a similar occurrence where starting a circulating water pump caused the Control Room Ventilation to shift to the makeup mode.

Solutions to the problem are being investigated by the Corporate Engineering group.



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

January 25, 1985

LTR: BYRON 85-0128

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 85-007-00, Docket No. 50-454.

Very truly yours,

R. E. Querio  
Station Superintendent  
Byron Nuclear Power Station

REQ/vda

Enclosure: Licensee Event Report No. 85-007-00

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

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