



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

March 29, 1993

LTR: BYRON 93-0175  
FILE: 3.03.0800 (1.10.0101)

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)(i)(B).

This report is number 93-002; Docket No. 50-455.

Sincerely,

G.K. Schwartz  
Station Manager  
Byron Nuclear Power Station

GKS/CW/ng

Enclosure: Licensee Event Report No. 93-002

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

050062

9304060079 930329  
PDR ADOCK 05000455  
S PDR

(0994R/VS-5)

JE22 1/1

## LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Byron, Unit 2										Docket Number (2) 0   5   0   0   0   4   5   5					Page (3) 1   of   0   3				
Title (4) Unit 1 Essential Service Water Pump Availability to Unit 2 Surveillance Not Completed																			
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	1   1	9   3	9   3	0   0   2	0   0	0   3	2   9	9   3	None		0   5   0   0   0   1   1								
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)																			
OPERATING MODE (9)			20.402(b)			20.405(c)			50.73(a)(2)(iv)			73.71(b)							
POWER LEVEL (10)			20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)			73.71(c)							
0   9   9			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)			X 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 R. Wegner, Operating										Ext. 2215									
D. Flowers, Operating										Ext. 2206									
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	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS									
				N															
SUPPLEMENTAL REPORT EXPECTED (14)												Expected Submission Date (15)							
Yes (If yes, complete EXPECTED SUBMISSION DATE)												X   NO							
ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)																			

During the second shift performance of 2BOS 0.1-1,2,3, Shiftly/Daily Operating Surveillance, it was discovered that the Unit 1 Essential Service Water pump availability to Unit 2 surveillance, 2BOS 7.4.1.a-1, had not been performed. The Essential Service Water (SX)[BI] pump availability surveillance was performed at 1121 on March 11, 1993. Having been previously performed at 0254 on March 10, 1993 this exceeded the surveillance's 24 hour frequency.

The root cause of this event was the failure to properly complete the Shiftly/Daily Operating surveillance. The step requiring the performance of the SX availability surveillance was mistakenly marked "N/A", which resulted in the SX availability surveillance not being performed until 1121 on March 11, 1993. An additional factor is that the Shiftly/Daily Operating surveillance uses discretionary steps to direct operators to perform surveillances, based on plant conditions.

To prevent recurrence, the individuals involved were counseled on the importance of attention to detail and the consequences of complacency. In addition, both Units' Shiftly/Daily Operating surveillances have been revised.

This event is reportable per 10CFR 50.73(a)(2)(1)(B), for any operation or condition prohibited by the Station's Technical Specifications.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)					Page (3)		
		Year	///	Sequential Number	///	Revision Number			
Byron, Unit 2	0   5   0   0   0   4   5   5	9   3	-	0   0   2	-	0   0	0   2	Of	0   3

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

A. PLANT CONDITIONS PRIOR TO EVENT:

Event Date/Time 03-11-93 / 1120

Unit 1 MODE 6 - Refueling Rx Power 0 RCS [AB] Temperature/Pressure 80°F / 0

Unit 2 MODE 1 - PWR Ops Rx Power 99.6 RCS [AB] Temperature/Pressure NOT / NOP

B. DESCRIPTION OF EVENT:

On March 11, 1993, Unit 2 was in Mode 1 and Unit 1 was in Mode 6. Pursuant to the requirements of Technical Specification 3.7.4.1, with Unit 1 in Modes 5 or 6, one of its SX pumps must be verified available to support Unit 2 operations, once every 24 hours. This is accomplished via a step in the first shift set of rounds in Shiftly/Daily Operating surveillance 2BOS 0.1-1,2,3. The first shift set of rounds is normally taken at approximately 0300. The step directs the Nuclear Station Operator (NSO) (Licensed) to perform 2BOS 7.4.1.a-1, "Unit 1 SX Pump Availability to Unit 2", if Unit 1 is in Modes 5 or 6. This surveillance specifies which Unit 1 SX pump is the "available" pump for Unit 2. Proper performance of this step is documented by the NSO initialing in the space provided on the Shiftly/Daily surveillance and attaching the completed data sheet from the SX availability surveillance. If Unit 1 is not in Modes 5 or 6, the step in the Unit 2 Shiftly/Daily surveillance directing the performance of the SX availability surveillance is marked "N/A". During the first shift's performance of the Shiftly/Daily surveillance on March 11, 1993 the Unit NSO mistakenly marked the step requiring the SX availability surveillance "N/A". As a result, the Unit 1 SX pump availability to Unit 2 surveillance was not performed and the data sheet was not attached to the Shiftly/Daily surveillance. At 0450, the Shift Control Room Engineer (SCRE) (Licensed) and at 0455, the Shift Engineer (SE) (Licensed), reviewed the Shiftly/Daily surveillance, but failed to detect the "N/A" for the step requiring the SX availability surveillance and the missing attachment.

The second shift performance of the Shiftly/Daily Operating surveillance were taken at approximately 1100 hours. It was at this time, that the Unit NSO discovered the error, notified the SE, and subsequently performed the SX availability at 1121 on March 11, 1993. The surveillance was previously performed at 0254 on March 10, 1993 thus the surveillance's 24 hour frequency was exceeded.

No manual or automatic safety system actuations occurred as a result of this event. Stable plant conditions were maintained at all times.

This event is reportable per 10CFR50.73(a)(2)(i)(B), for any operation or condition prohibited by the station's Technical Specifications.

C. CAUSE OF EVENT:

The cause of event was the failure to properly complete the requirements of the Shiftly/Daily Operating surveillance, 2BOS 0.1-1,2,3. This was due to personnel error on the part of the Unit NSO, in marking the step requiring the SX availability surveillance "N/A", and on the part of the SCRE and SE, in performing an inadequate review of the Shiftly/Daily surveillance.

A contributing factor was that the step requiring the SX availability surveillance is discretionary in nature, being triggered by the mode of the opposite Unit. Normally, this step is marked "N/A" as both units are in Mode 1.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION												Form Rev 2.0					
FACILITY NAME (1)		DOCKET NUMBER (2)				LER NUMBER (6)						Page (3)					
						Year	///	Sequential Number		///	Revision Number						
Byron, Unit 2		0   5   0   0   0   4   5   5				9	3	-	0	0	2	-	0	0	0   3	0   3	
TEXT      Energy Industry Identification System (EIIIS) codes are identified in the text as [XX]																	

D. SAFETY ANALYSIS:

There were no safety consequences impacting plant or public safety as a result of this event. Shift personnel are cognizant of which Unit 1 SX pump is the designated "Available" pump and it is protected from any work activities. In addition, both Unit 1 and Unit 2 NSO log books were reviewed and no manipulations involving SX were performed that would have made the designated Unit 1 SX pump unavailable.

Had this event occurred under a more severe set of initial conditions, such as a challenge to the SX system, the Unit 1 SX pump would still have been available to Unit 2 as no manipulations affecting the SX alignment were made during the time period of this event.

E. CORRECTIVE ACTIONS:

The Shiftly/Daily Operating surveillances have been revised to enhance the human factoring and flow of the procedures. The discretionary step directing the performance of the SX Availability Surveillance has been revised to prevent recurrence.

In addition, the Unit NSO, SCRE and SE were counseled on the importance of attention to detail and the consequences of complacency.

F. RECURRING EVENTS SEARCH AND ANALYSIS:

a) EVENT SEARCH (DIR, LER)

There have been previous missed surveillances documented. However, none were found for the SX system.

b) INDUSTRY SEARCH (OPEX's NPRDS)

None found.

c) NWR

None.

d) ANALYSIS

None.

G. COMPONENT FAILURE DATA:

MANUFACTURER	NOMENCLATURE	MODEL NUMBER	MFG PART NUMBER
--------------	--------------	-----------------	--------------------

None.