

# 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) REACTOR TRIP DURING REACTOR TRIP BREAKER SURVEILLANCE DUE TO AN INADEQUATE TEMPORARY PROCEDURE

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	6	8	6	---	0	0	1	---	0	5	0	0	0	1	1
0	1	1	6	8	6	---	0	0	1	---	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 8	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 T. Tulon, Operating Engineer Ext. 2216 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
D				N					

## SUPPLEMENTAL REPORT EXPECTED (14)

[Yes (If yes, complete EXPECTED SUBMISSION DATE)] X NO Expected Submission Date (15) Month Day Year

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

On January 16, 1986 at 0449, while performing the "Bimonthly, Staggered Basis, Reactor Trip Breaker (RTB) Shunt and Under Voltage Trip Independence Test - Train B" surveillance, an inadvertent reactor trip occurred due to ambiguities in the temporary procedure in use. The trip resulted when, with the RTB's aligned to test the 'B' RTB (Bypass breaker 'B' closed), the non-licensed operator incorrectly pressed the Auto Shunt Trip TRIP pushbutton on the Train 'A' Auto Shunt Trip Test Panel in lieu of the Train 'B' pushbutton. This opened RTB A which tripped the reactor. As a result of the plant's normal response to the transient an Auxiliary Feedwater actuation occurred on low steam generator level. The plant was restored to stable conditions in Hot Standby at approximately 0520.

The cause of the trip was due to insufficient detail in the procedure to identify which of two nearly identical Auto Shunt Trip Test Panels the operator was to be at. This was compounded by a lack of clear labeling at the panels to distinguish Train 'A' from Train 'B'.

To prevent recurrence these cabinets and panels have been more clearly labeled. Additionally, the station's procedure for writing procedures will be revised to require a walk-thru of the procedure prior to issuance, switches be identified as they are labeled in the field, and notes or caution statements be added at steps that cause breaker trips.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

A. PLANT CONDITIONS PRIOR TO EVENT:

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

B. DESCRIPTION OF EVENT:

On January 16, 1986 at 0449 an inadvertent reactor trip occurred during the performance of the "Bimonthly, Staggered Basis, Reactor Trip Breaker [JB-BKR] Shunt and Under Voltage Trip Independence Test - Train B" surveillance. The procedure in use was a temporary change to the existing procedure to verify the operation of the shunt trip attachment on any reactor trip signal. This temporary procedure had been successfully performed on 12-9-85.

Immediately prior to the trip the Reactor Trip Breakers (RTB) and Bypass Trip Breakers (BYB) had been aligned with RTB-'A', RTB-'B' and BYB-'B' racked into the "CONNECT" position and closed. BYB-'A' racked to the 'TEST' position (control power connected, but the breaker removed from the electrical bus bars) and open. With this alignment, step 10 of the procedure directs the operator to "DEPRESS and HOLD the Auto Shunt Trip - TRIP pushbutton for Train B at 1RD05E." Incorrectly the operator depressed the Train A Auto Shunt Trip - TRIP pushbutton which interrupted power to the control rod drive mechanisms [AA], resulting in the reactor trip.

The Control Room Operators responded properly to the reactor trip in accordance with Byron Emergency Procedure, 1BEP-0, "Reactor Trip or Safety Injection Unit 1".

As a result of the plant's response to the transient an automatic Auxiliary Feedwater (AF) [BA] Actuation occurred on Low Steam Generator Level at 0450. At 0511 the Station's Start Up Feedwater pump [SJ-P] was started and the 'A' and 'B' AF pumps secured at 0512 and 0518 respectively, with stable plant conditions restored.

C. CAUSE OF EVENT:

This event was due to deficiencies with the temporary change to the surveillance procedure.

Steps 5 and 8 of the surveillance procedure direct the nonlicensed operator to perform operations within cabinet 2 of 1RD05E, Reactor Trip Breaker Enclosure. Both Cabinet 1 and 2 contain similar Auto Shunt Trip Test Panels. Steps 9 and 10 direct the operator to perform operations on the Auto Shunt Trip Panel for Train B without specifying that these operations should take place in Cabinet 1. Due to the deficient labeling of the two Auto Shunt Trip Test Panels, the operator was unaware that he was on the Train A vice Train B panels. With the panels being similarly laid out he was able to continue the procedure without unacceptable results until called upon to test the shunt trip.

D. SAFETY ANALYSIS:

The health and safety of the plant and public were not affected by this event as the plant responded normally to the reactor trip in accordance with its design. There were no safety consequences as the plant parameters remained within the confines of the FSAR analysis.

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

E. CORRECTIVE ACTIONS:

Actions taken to prevent recurrence of this event have included:

- 1) Labeling the cabinets and test switches to clearly identify them.
- 2) Walking through the procedure with both operating and Tech Staff personnel to identify potential areas of ambiguity and confusion.

Additional actions to be taken are for procedures identified as having a high risk of generating a reactor trip:

- 1) Adding notes and/or caution statements at steps that cause breaker trips.
- 2) Insuring the nomenclature used throughout the procedure is consistent with the installed labeling.

F. PREVIOUS OCCURRENCES:

<u>LER NUMBER</u>	<u>TITLE</u>
85-034-00	Main Steamline Isolation During Surveillance
85-078-00	Reactor Trip

G. COMPONENT FAILURE DATA:

<u>MANUFACTURER</u>	<u>NOMENCLATURE</u>	<u>MODEL NUMBER</u>	<u>MFG PART NUMBER</u>
NONE			



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

February 7, 1986

LTR: BYRON 86-0122

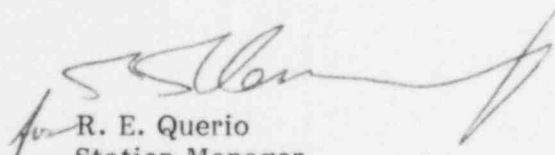
U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

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 86-001; Docket No. 50-454.

Very truly yours,

  
R. E. Querio  
Station Manager  
Byron Nuclear Power Station

REQ/bf

Enclosure: Licensee Event Report No. 86-001

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

#3/017

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