

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)

BYRON, UNIT 1

DOCKET NUMBER (2)

0 5 0 0 0 4 5 4 1 OF 0 2

PAGE 13

TITLE (4)

IMPULSE PRESSURE CHANNEL IN TEST/REACTOR TRIP

EVENT DATE (6)			LER NUMBER (8)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (9)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER(S)
0 3	0 5	8 5	8 5	0 2	9 0	0 4	0 1	8 5		0 5 0 0 0 0
OPERATING MODE (5)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.71 (Check one or more of the following) (11)							
3			<input checked="" type="checkbox"/> 30.4000a) <input type="checkbox"/> 30.4000a1) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 73.710a)							
POWER LEVEL (VBS)			<input type="checkbox"/> 30.4000a1(1)(B) <input type="checkbox"/> 30.300a1(1) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 73.710a)							
0 0 0			<input type="checkbox"/> 30.4000a1(1)(B) <input type="checkbox"/> 30.300a1(2) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 73.710a)							
			<input type="checkbox"/> 30.4000a1(1)(B) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 73.710a)							
			<input type="checkbox"/> 30.4000a1(1)(B) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 73.710a)							
			<input type="checkbox"/> 30.4000a1(1)(B) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 73.710a)							
			<input type="checkbox"/> 30.4000a1(1)(B) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 30.730a1(2)(H) <input type="checkbox"/> 73.710a)							

LICENSEE CONTACT FOR THIS LER (12)

NAME

Peter Knarr, Tech Staff Engineer, Ext. 385

TELEPHONE NUMBER

AREA CODE

8 0 1 5 2 1 3 4 1 - 1 5 4 1 4 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
A	/ /	/ / / / /	/ / / / /	N					

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

During reactor startup, a reactor trip occurred as the result of troubleshooting being done by Instrument Maintenance (IM) personnel. This event resulted from the failure of personnel to comply with a procedural prerequisite prior to the attempted troubleshooting. Corrective actions will consist of a training class for IM Control System Technicians concerning reactor trip logic and the inclusion of high visibility cover sheets on surveillance procedures that impact equipment with reactor trip inputs. Also, this LER will be required reading for all licensed operators.

8504150512 850305
PDR ADOCK 05000454
S PDR

IE 22
111

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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 2 9	0 0	0 2	OF 0 2

TEXT (If more space is required, use additional NRC Form 306A's) (17)

On March 5, 1985 at 0125 hours, during rod withdrawal to criticality, a reactor trip signal was generated. This occurred when Instrument Maintenance personnel placed one of the turbine impulse pressure channels (P-505) in "TEST" which enabled the Turbine Power Greater than 10% Permissive (P-13). P-13 then enabled the At Power Permissive (P-7). P-7 unblocked the turbine trip input to reactor trip and, with all four turbine stop/throttle valves closed, the turbine trip signal caused the reactor trip.

Earlier that evening, prior to closing the reactor trip breakers, the Shift Engineer requested the duty Instrument Maintenance Foreman (IMF) to troubleshoot the P-505 channel. This request was made because it was suspected that the channel was indicating too high. The IMF then assembled a work package for the Control Systems Technician (CST) consisting of a Work Planning Log (BAP 400-T4) and a copy of the channel calibration procedure (BIS 3.1.1-044). The Work Planning Log allowed the CST to perform preliminary investigation of the turbine impulse pressure channel prior to detailing work instructions on a Nuclear Work Request. The channel calibration procedure was initially included in the work package only as a guideline, although, when troubleshooting, the procedure's Prerequisites, Precautions and Limitation and Actions sections should be adhered to.

At 0016 hours on 3-5-85 the reactor trip breakers were closed in preparation for reactor startup. Shortly thereafter the Shift Control Room Engineer (SCRE) signed the Work Planning Log allowing the CST to begin troubleshooting the P-505 channel. When the channel was placed in "TEST", the reactor trip occurred. The root cause of this event was the failure of personnel to follow Prerequisite C.3 of BIS 3.1.1-044 which states "This procedure may be performed in MODE 1 above 10% power, or MODES 3, 4, 5, & 6, providing the RX Trip Breakers are open".

This event had minimal safety consequences since the plant responded as designed. A similar event (Licensee Event Report 85-009-00) occurred on 1-8-85 when Instrument Maintenance personnel caused steamline isolation when, contrary to an approved procedure, two channels of the IC steam generator pressure protection were simultaneously placed in TEST.

Two major corrective actions are being implemented to prevent recurrence of this type of incident. The Training Department has initiated a short class for CST's to increase their familiarity with the reactor protection logic. In addition, all surveillance procedures that affect equipment having input to reactor trip logic will have a high visibility cover sheet indicating that the equipment involved can cause a reactor trip. This LER will also be made required reading for all licensed operators.



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

April 1, 1985

LTR: BYRON 85-0470

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 85-029-00, Docket No. 50-454.

Very truly yours,

R. E. Querio
Station Superintendent
Byron Nuclear Power Station

REQ/gt

Enclosure: Licensee Event Report No. 85-029-00

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

#3/017

IE 22

1/1