



Commonwealth Edison
Braidwood Nuclear Power Station
Route #1, Box 84
Braceville, Illinois 60407
Telephone 815/458-2801

May 25, 1994
BW/94-0091

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

Dear Sir:

The enclosed Licensee Event Report from Braidwood Generating Station is being transmitted in accordance with the requirement of 10CFR50.73 (a)(2)(iv), which requires a 30-day written report.

This report is number 94-009-00, Docket No. 50-456.

K. L. Koffron
Station Manager
Braidwood Station

KLK/CP/dla

Encl: Licensee Event Report
No. 456/94-009-00

cc: NRC Region III Administrator
NRC Resident Inspector
INPO Record Center
CECo Distribution Center

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PDR ADOCK 05000456
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LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Braidwood 1	DOCKET NUMBER (2) 05000456	PAGE (3) 1 OF 4
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TITLE (4) Unexpected Reactor Protection System actuation due to a procedural deficiency

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 NAME	DOCKET NUMBERS
04	25	94	94	-- 009 --	00	05	25	94	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)	20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0		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
		20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
		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 D. Turner, Operating Staff	TELEPHONE NUMBER (Include Area Code) (815) 458-2801 x2476
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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
				N					

SUPPLEMENTAL REPORT EXPECTED (14)				x	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).									

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

An unexpected reactor trip actuation occurred while performing refueling outage activities. Reactor trip breakers were closed to support testing and a steam generator was being drained for chemistry. The Solid State Protection System (SSPS) had been disabled for Mode 5 operation per procedure BwOP RP-7. Upon reaching the low low level in the steam generator, the reactor trip breakers unexpectedly opened. The root cause of this event was a procedural deficiency with BwOP RP-7. The procedure specifically identifies two systems that are not disabled when performing the procedure. The Reactor Protection System is not among the systems identified and the belief was that it was disabled. Corrective actions include revising BwOP RP-7 to identify the fact that the reactor trip function is not disabled by this procedure.

NRC FORM 366A (5-92)		U.S. NUCLEAR REGULATORY COMMISSION		APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95	
LICENSEE EVENT REPORT (LER) TEXT CONTINUATION				ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.	
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			94	-- 009 --	00
2 OF 4					
TEXT (If more space is required, use additional copies of NRC Form 366A) (17)					
A. PLANT CONDITIONS PRIOR TO EVENT:					
UNIT: Braidwood 1; EVENT DATE: April 25, 1994;					
EVENT TIME: 0606;					
MODE: 5; RX POWER: 0%;					
RCS [AB] TEMPERATURE/PRESSURE: 175°F/355 psig					
B. DESCRIPTION OF EVENT:					
<p>On April 24, 1994, both trains of the Solid State Protection System (SSPS) were disabled per BwOP RP-7, a typical configuration for Mode 5 operation. The 1C Steam Generator (SG) was being drained for chemistry. The reactor trip breakers had been closed to support System Engineering testing that was to occur the next day. Closing these breakers was an abnormal condition for Mode 5 with the configuration of SSPS per BwOP RP-7. The day Shift Engineer had been approached by System Engineering to perform this evolution, but did not have the manpower to support it. The Shift Engineer recognized the possible problems of performing this evolution under the current conditions. He then discussed with System Engineering the possibility of installing jumpers to bypass the Steam Generator low level signal from being initiated. System Engineering informed him that it was possible to install jumpers for this purpose, but no decision was made on whether or not to install the jumpers. The Shift Engineer discussed this situation with the oncoming Shift Engineer during shift turnover. From this turnover, the afternoon Shift Engineer believed that System Engineering was going to install the jumpers. He did not, however, verify this information nor communicate it in his turnover to the midnight Shift Engineer. The other shift personnel involved did not question whether jumpers were installed or not because they believed that BwOP RP-7 left the system in such a condition that the reactor trip portion of SSPS was blocked. The procedure BwOP RP-7 states it accomplishes the following:</p> <p style="padding-left: 40px;">Disables the automatic actuation capability of all SSPS functions with the exception of BDPS (Boron Dilution Prevention System) and VQ (Containment Purge) (on a containment high radiation condition).</p> <p>This statement in the procedure lead to the belief that the reactor trip portion was blocked, since it was not identified as an exception. In the Nuclear Station Operator (NSO) turnover from afternoons to midnights it was discussed that the 1C SG was being drained, SSPS was disabled, and the reactor trip breakers were closed to support System Engineering testing. Due to the configuration of SSPS, the midnight crew believed there was no problem with the evolutions being performed and SG level was not a concern. During midnight shift, the low level alarm for the 1C SG came in and was</p>					

NRC FORM 366A
(5-92)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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

B. DESCRIPTION OF EVENT (continued):

acknowledged by the NSO because he knew that the 1C SG was being drained and expected a low level. At 0606 on April 25, a low low (low-2) level was reached on the 1C Steam Generator causing a reactor trip signal and the reactor trip breakers opened. The on-shift personnel immediately investigated the trip. They then learned that BwOP RP-7 did not clarify the Reactor trip portion as being enabled. At 0843 a four hour non-emergency phone call was made to the NRC.

This report is being submitted pursuant to 10CFR50.73(a)(2)(iv), which requires the reporting of any event or condition that resulted in automatic actuation of the Reactor Protection System.

C. CAUSE OF EVENT:

The root cause of this event was a procedural deficiency with BwOP RP-7. The procedure specifically identifies two systems that are not disabled when performing the procedure. The Reactor Protection System is not among the systems identified and the belief was that it was disabled.

A contributing cause was personnel error due to miscommunications. The afternoon Shift Engineer believed that System Engineering was going to install jumpers. He did not, however, verify this information nor communicate it in his turnover to the midnight Shift Engineer.

D. SAFETY ANALYSIS:

This event had no effect on plant or public safety. All systems performed as designed.

E. CORRECTIVE ACTIONS:

BwOP RP-7 will be revised to identify the fact that it does not disable the Reactor Protection System. This will be tracked to completion by NTS# 456-180-94-00901.

Training also will train on what the exact configuration of SSPS is when in BwOP RP-7. This will be tracked to completion by NTS# 456-180-94-00902.

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

F. PREVIOUS OCCURRENCES:

There have been previous occurrences of reactor trip/ESF actuations due to procedural deficiencies:

LER 2-92-003; 2A ESSENTIAL SERVICE WATER PUMP AUTOMATIC START DUE TO PROCEDURAL DEFICIENCY

LER 2-93-002; UNPLANNED ENGINEERED SAFETY FEATURE (ESF) ACTUATION DUE TO MANAGEMENT AND PROCEDURAL DEFICIENCY

G. COMPONENT FAILURE DATA:

This event was not the result of component failure, nor did any components fail as a result of this event.