

Commonwealth Edison Company
Braidwood Generating Station
Route #1, Box 84
Braidwood, IL 60407-9619
Tel 815-458-2801



January 3, 1996
BW/96 0003

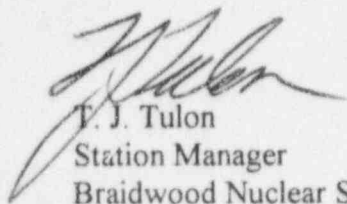
Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

The enclosed Licensee Event Report from Braidwood Generating Station is being transmitted in accordance with the requirement of 10 CFR 50.73(a)(2)(iv), which requires a 30-day written report.

This report is number 95-018-00, Docket No. 50-456.

Cordially,


F. J. Tulon
Station Manager
Braidwood Nuclear Station

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Encl: Licensee Event Report No. 456-95-018-00

cc: NRC Region III Administrator
NRC Resident Inspector
INPO Records Center
ComEd Distribution Center
I.D.N.S.
I.D.N.S. Resident Inspector

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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 (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.

FACILITY NAME (1) Braidwood Unit 1	DOCKET NUMBER (2) 05000456	PAGE (3) 1 OF 4
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TITLE (4) Manual reactor trip inserted during Rod Control System Testing following a failure of Shutdown Rod D-2 to withdraw on demand.

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
12	07	95	95	-- 018 --	00	01	05	96	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) 3	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10) 0.8	20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	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					
	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 M. Olson, Root Cause Team	TELEPHONE NUMBER (include Area Code) (815) 458-2801 x2028
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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

SUPPLMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

Unit 1 was in Mode 3 at Normal Operating Temperature and Pressure. The Digital Rod Position Indication (DRPI) Operability Verification prior to and during Rod Drop Testing Surveillance was being performed. While beginning withdrawal of Shutdown Bank 'A' (SBA), rod D-2 failed to withdraw. With the remaining rods in SBA at 10 steps, the decision was made to open the Reactor Trip Breakers to allow the rods to fully insert into the core. This action was not required by any Technical Specifications but was done as a conservative action to allow repair of the Rod Control System and was consistent with the decisions to manually trip the Reactor following previous events of this nature. At 1032 CST the Reactor Trip Breakers were opened. All rods were verified to be fully inserted following the manual Reactor Trip. An expected response from the manual Reactor Trip was a Feedwater Isolation which did occur as designed and was subsequently reset. At 1258 CST, the appropriate NRC notification was made via the ENS phone system pursuant to 10CFR50.72(b)(2)(ii).

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.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)		PAGE (3)
Braidwood Unit 1	05000456	YEAR 95	SEQUENTIAL NUMBER -- 018 --	REVISION NUMBER 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 Unit 1 EVENT DATE: 12/07/95
 EVENT TIME: 1032
 MODE: 3 RX POWER: 0%
 RCS [AB] TEMPERATURE/PRESSURE: NOT/NOP

B. DESCRIPTION OF EVENT:

There were no systems or components inoperable at the beginning of this event that contributed to the severity of the event.

On 12/07/95, in preparation for performing pre-startup rod drop tests, the Reactor Trip Breakers were closed, Shutdown Margin verified satisfactory for withdrawal of Shutdown Bank Control Rods, and 1BwOS 10.5-1, Special Test Exception Rod Position Indication Surveillance, entered.

At 1032, following replacement of a Failure Detector Card in Power Cabinet SCDE, Shutdown Banks E, D, C, and B were successfully tested. While beginning withdrawal of Shutdown Bank 'A', rod D-2 failed to withdraw with the remaining rods in that bank. The Shift Engineer (SRO Licensed) was immediately notified and the decision was made to manually open the Reactor Trip Breakers to allow the remainder of the rods in SBA to reinsert the bottom of the core position. The Reactor Trip Breakers were opened by actuating a manual Reactor Trip from the Main Control Room. All systems responded as designed to the manual Reactor Trip signal and all SBA rods re-inserted to the bottom of the core.

The cognizant System Engineer (Non-Licensed) and Instrument Maintenance personnel were notified to troubleshoot the Rod Control problem. All fuses in the Power Cabinet for rod D-2 in SBA were checked with an ohmmeter and found to be not blown. All pop-up fuse indicators were checked and found to be intact. As a conservative measure, all fuse holders were cleaned and fuses replaced.

At 1258 CST, the appropriate NRC notification was made via the ENS phone system pursuant to 10CFR50.72(b)(2)(ii).

At 1326, following a Heightened Level of Awareness meeting for subsequent Rod Testing, the Reactor Trip Breakers were reclosed and Shutdown Bank 'A' rods withdrawn to six steps and reinserted. All SBA rods, including rod D-2, worked normally. 1BwOS 10.5-1, Rod Position Indication surveillance under Special Test Exception 3.10.5, was resumed and completed satisfactorily with no additional occurrences of rods failing to withdraw.

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.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Braidwood Unit 1	05000456	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 of 4
		95	-- 018 --	00	

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

B. DESCRIPTION OF EVENT (continued):

This event is being reported pursuant to 10CFR50.73(a)(2)(iv) - Any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature, including the Reactor Protection System.

C. CAUSE OF EVENT:

The manual Reactor Trip was initiated as a conservative action resulting from the failure of Rod D-2 in SBA to withdraw as demanded by Rod Control. There are no administrative nor Technical Specification requirements to open the Reactor Trip Breakers in this situation.

D. SAFETY ANALYSIS:

This event had no effect on the safety of the plant or the public. All systems operated as designed except for Control Rod D-2 which remained on the bottom of the core during DRPI Operability testing. All remaining rods in Shutdown Bank 'A' automatically returned to 0 steps following the manual reactor trip signal.

There was no reduction in the margin of safety as defined in Technical Specifications since adequate Shutdown Margin was maintained and all rods remained trippable at all times. All other Control and Shutdown Bank rods remained in the fully inserted position during the testing of SBA and all rods within that bank remained aligned within plus or minus 12 steps. All conditions and actions for Special Test Exception Tech Spec 3.10.5 were met.

E. CORRECTIVE ACTIONS:

Immediate investigation by the System Engineer and IMD personnel into the failure of rod D-2 to withdraw could find no problems existing in the Rod Control System. There were no local indications at the Rod Control Cabinets that would indicate a problem existed. All fuses for this rod were checked with an ohmmeter and found to be intact. As a precautionary measure, all the fuse holders were cleaned and fuses replaced with new ones. All blown fuse pop-up indicators also indicated intact for this rod.

The replaced fuses were subsequently sent to the corporate Materials Analysis Department to determine if an internal failure mode could be detected. This investigation will be tracked to completion by NTS Action Item #456-180-95-01801.

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Braidwood Unit 1		05000456		YEAR	SEQUENTIAL NUMBER
				95	-- 018--
				REVISION NUMBER	PAGE (3)
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

F. PREVIOUS OCCURRENCES:

Two previous occurrences were found where a fuse in a Rod Drive Power Cabinet resulted in a dropped control rod at Braidwood Station:

DVR 20-1-87-144 CONTROL ROD DROPPED TO ZERO STEPS DUE TO A BLOWN FUSE

During the performance a Rod Position Daily Surveillance prior to and after rod drop testing, it was observed that while pulling Control Bank 'B' that rod k-14 had dropped. It was discovered that Control Bank 'B' Power Cabinet had a blown fuse, FU15. Operators subsequently drove rods to the bottom as indicated by group and DRPI position, tripped the turbine, and manually opened the Reactor Trip Breakers. The fuse FU15 was subsequently replaced.

LER 20-1-95-016 MANUAL REACTOR TRIP

During the performance of DRPI operability testing, Rod Control Bank 'B' was being withdrawn. All rods in this bank indicated 12 steps withdrawn except for rod K-12, which indicated 0 steps. Following discussions with the Shift Engineer and Senior Operations Supervisor, the Reactor Trip Breakers were manually opened to allow re-insertion of all rods in CBB. All rods fully inserted as designed. It was later determined that the Stationary Gripper Fuse had blown for Control Rod K-12. The fuse was replaced and DRPI testing completed satisfactorily.

G. COMPONENT FAILURE DATA:

No components were positively identified to be failed during or as a result of this event. The fuse holders were cleaned to eliminate the possibility of bad contacts causing a signal interruption. The fuses were tested with an ohmmeter and found to be intact. The fuses were replaced as a conservative measure and the replaced fuses sent to the Corporate Materials Analysis Department to investigate the possibility of an internal fault with the fuses.