



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

September 22, 1992  
BW/92-0484

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 to you with the requirement of 10CFR50.73(a)(2)(iv) which requires a 30-day written report.

This report is number 92-005-00, Docket No. 50-457.

K. L. Koffron  
Station Manager  
Braidwood Nuclear Station

KLK/AJS/dla  
631  
ZD85G

Encl: Licensee Event Report No. 92-005-00

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

9209290358 920922  
PDR ADOCK 05000457  
S PDR

*Handwritten initials/signature*

## LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1)

Docket Number (2)

Page (3)

Braidwood 2

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Title (4)

Containment Ventilation Isolation Due to Checksource Failure of 2AR12J

Event Date (5)				LER Number (6)				Report Date (7)				Other Facilities Involved (8)			
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Month	Day	Year	Facility Names	Docket Number(s)		
0   8	2   6	9   2	9   2	0   0   5	0   0	0   9	1   1	9   2	None		0   5   0   0   0		0   5   0   0   0		

OPERATING  
MODE (9)THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR  
(Check one or more of the following) (11)

POWER LEVEL (10)	1   0   0	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
		20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)	in Abstract
		20.405(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)	below and in
		20.405(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(x)	Text)

## LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER
Y. O'Brien, Technical Staff Engineer	Ext. 2562
	AREA CODE 8   1   5   4   5   8   -   2   8   0   1

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPS

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

At 2247 on August 26, 1992 the containment fuel handling incident area radiation monitor initiated a Train B Containment Ventilation Isolation signal. The Nuclear Station Operator acknowledged the alarm and verified the failed checksource status. The event is believed to be caused by a lightning strike which induced a noise spike into the containment fuel handling incident area radiation monitor. Further troubleshooting identified that the checksource circuitry and all associated instrumentation was functioning properly. Radiation monitor 2AR12J was declared inoperable after it was discovered that the skid was in a failed state. Also, it was immediately verified that a high radiation condition did not exist. The monitor was tested and observed. No additional failures occurred. The monitor was then declared operable. There have been previous occurrences of Engineered Safety Features Actuation due to external noise spiking of radiation monitors. This is the first occurrence of an externally generated noise spike on this monitor.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION												Form Rev 2.0					
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						Year		Sequential Number		Revision Number							
Braidwood 2		0   5   0   0   0   4   5   6				9	2	-	0	0	5	-	0	0	0   2   OF	0   3	
TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]																	

#### A. PLANT CONDITIONS PRIOR TO EVENT:

UNIT: BRAIDWOOD 2;

EVENT DATE: August 26, 1992; EVENT TIME: 2247;

MODE 1 - Power Operation Rx Power 100%

RCS [AB] Temperature/Pressure NOT / NOT

#### B. DESCRIPTION OF EVENT:

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

At 2247 on August 26, 1992 the containment fuel handling incident area radiation monitor (AR) [IL] went into Alert mode. There was a corresponding alarm and interlock actuation. This initiated a Train B Containment Ventilation Isolation signal. The Nuclear Station Operator (NSO) (Licensed Reactor Operator) acknowledged the alarm and verified the failed checksource status. Limiting Condition for Operations Action Requirement (LCOAR) 3.3.3.1 was entered and complied with.

Plant conditions remained stable throughout the event.

Operator actions neither increased or decreased the severity of the event.

The appropriate NRC notification via the ENS phone system was made at 2345 pursuant to 10CFR50.72(B)(2)(ii).

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 root cause of this event is unknown. The event is believed to be caused by a lightning strike which induced a noise spike into the containment fuel handling incident area radiation monitor. At the time of the event, the area radiation monitor was in the process of its routine 24 hour checksource failure test. It was first thought that the containment ventilation isolation signal was associated with this evolution. Further investigation revealed that the skid transferred to an inoperable state. The skid was monitored and further troubleshooting identified that the checksource circuitry and all associated instrumentation was functioning properly.

#### D. SAFETY ANALYSIS:

This event had no effect on the safety of the plant or the public. All systems operated as designed.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				Page (3)	
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TEXT Energy Industry Identification System (EIIIS) codes are identified in the text as [XX]

D. SAFETY ANALYSIS:(continued)

The containment purge isolation valves were closed at the time of the event. In addition, the equipment operated as designed. Redundant indication was provided by ZWT-AR011, along with its associated protective function of Train A Containment Ventilation Isolation.

The worst case condition would be an extended loss of power to a radiation monitor providing input to ESF actuation functions. The radiation monitoring and ESF input logic are designed so that on loss of power to the monitor its ESF input reverts to the tripped condition as was the case in this event. This is enveloped in section 7 of the Updated Final Safety Analysis Report (UFSAR).

E. CORRECTIVE ACTIONS:

Radiation monitor ZAR12J was declared inoperable after it was discovered that the skid was in a failed state. Also, it was immediately verified that a high radiation condition did not exist. The monitor was tested and observed. No additional failures occurred. The monitor was then declared operable.

F. PREVIOUS OCCURRENCES:

There have been previous occurrences of Engineered Safety Features Actuation due to external noise spiking of radiation monitors. The corrective actions were implemented addressing both root and contributing causes. The previous events involved different radiation monitors, therefore the previous corrective actions are not applicable to this event. This is the first occurrence of an externally generated noise spike on this monitor. The previous events are listed below:

LER	TITLE
87-038	Engineered Safety Feature Actuation of Control Room Ventilation Due to Noise Spike From Radiation Monitor OPR32J
87-051	Spurious Spiking on OPR33J
88-011	Control Room Ventilation Shift to Emergency Make-up Mode Due to Spurious Radiation Monitor Noise Spike
88-001	Spike on Gas Channel Radiation Monitor OPR32J For Unknown Reasons
90-019	Control Room Ventilation Shift to Makeup Mode Due to OPR31J spike
92-007	Fuel Handling Building Ventilation Charcoal Booster Fan Automatic Start on Momentary Spike of OAR-55J

G. COMPONENT FAILURE DATA:

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