



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

August 21, 1992  
BW/92-0438

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 in accordance with the requirements of 10CFR50.73(a)(2)(iv) which requires a 30-day written report.

This report is numbered 92-007-00, Docket No. 50-456.

K. L. Kofron  
Station Manager  
Braidwood Nuclear Station

KLK/AJS/dla  
19ZCREG

Encl.: Licensee Event Report  
No. 92-007-00

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

9208250293 920824  
PDR ADOCK 05000456  
S PDR

IE 22  
41

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Braidwood 1 Docket Number (2) 0 5 0 0 0 4 5 6 Page (3) 1 of 0 3

Title (4) Fuel Handling Building Ventilation Charcoal Booster Fan Automatic Start on Momentary Spike of OAR-55J

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 7	2 5	9 2	9 2	0 0 7	0 0	0 8	1 9	9 2	None	0 5 0 0 0 1 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)

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify
<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	in Abstract
<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	below and in
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	Text)

LICENSEE CONTACT FOR THIS LER (12)

Name T. O'Brien, Technical Staff Engineer Ext. 2562 TELEPHONE NUMBER  
 AREA CODE 8 1 5 4 5 8 - 2 8 0 1

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

SUPPLEMENTAL REPORT EXPECTED (14)

Yes (If yes, complete EXPECTED SUBMISSION DATE)  NO Expected Submission Date (15) \_\_\_\_\_

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

At approximately 1226, on July 25, 1992, the detector for Area Radiation Monitor OAR-AR055J experienced a spike that caused a high radiation alarm. As a result, this caused the fuel handling building (FHB) charcoal booster fan OVA04CA to auto start and dampers OVA051Y, OVA058Y, OVA059Y, and OVA060Y to reposition in order to provide flow through the charcoal adsorbers. It was verified that an actual high radiation condition did not exist. Monitor OAR055J was declared inoperable, and an investigation was immediately initiated to determine the cause of the actuations. During the next several days the monitor and its associated instruments, and control circuits were tested. No problems were identified. At 2113, on July 30, 1992, OAR055J was declared operable. There has been no previous occurrences of external noise spiking associated with this monitor.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			Page (3)		
		Year	Sequential Number	Revision Number			
Braidwood 1	0   5   0   0   0   4   5   6	9   2	-   0   0   7	-   0   0	0   2	OF	0   3

TEXT Energy Industry Identification System (EIIIS) codes are identified in the text as ,XX]

A. PLANT CONDITIONS PRIOR TO EVENT:

UNIT: BRAIDWOOD 1;  
 EVENT DATE: July 25, 1992; EVENT TIME: 1226;  
 MODE 1 - Power Operation Rx Power 100%  
 RCS [A8] Temperature/Pressure: NOT / NOP

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 approximately 1226, on July 25, 1992, the detector for Area Radiation Monitor DRT-AR055J experienced a spike that caused a high radiation alarm. As a result, this caused the fuel handling building (FHB) charcoal booster fan (VA) [VG] 0VA04CA to auto start and dampers 0VA051Y, 0VA058Y, 0VA059Y, and 0VAD60Y to reposition in order to provide flow through the charcoal adsorbers.

Control room personnel verified automatic actions upon receipt of the alarms. It was also verified that an actual high radiation condition did not exist by trending DART055J and Train B Fuel Handling Building Incident Area Radiation Monitor DRT-AR056J. Monitor DART055J was declared inoperable, and an investigation was immediately initiated to determine the cause of the actuations. During the next several days the monitor and its associated instruments, and control circuits were tested. No problems were identified. At 2113, on July 30, 1992, DART055J was declared operable.

The appropriate NRC notification via the ENS phone system was made at 1424 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 was a spike of the electronics associated with area radiation monitor DART055J. Further testing and monitoring over several days could not recreate the spike. It is suspected that the spike was incurred by external noise. Therefore, the spike is considered an isolated occurrence.

D. SAFETY ANALYSIS:

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

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

D. SAFETY ANALYSIS:(continued)

The control circuits for 0AR055J reverted to their ESF safe configuration on loss of power. A FHB Charcoal Booster fan auto start and containment ventilation isolation occurred as designed. The redundant radiation monitors 0RI-AR056 and 1RT-AR12 were operable and available to provide indication and the appropriate ESF actuation function.

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 0AR55J was immediately declared inoperable. Also, it was immediately verified that a high radiation condition did not exist. The monitor was tested and observed over the next several days. No additional spikes 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:

DVR/LER	TITLE
20-1-87-244/87-038	Engineered Safety Feature Actuation of Control Room Ventilation Due to Noise Spike From Radiation Monitor 0PR32J
20-1-87-339/87-051	Spurious Spiking on 0PR33J
20-1-88-088/88-011	Control Room Ventilation Shift to Emergency Make-up Mode Due to Spurious Radiation Monitor Noise Spike
20-1-88-010/88-001	Spike on Gas Channel Radiation Monitor 0PR32J For Unknown Reasons
20-1-90-042/90-019	Control Room Ventilation Shift to Makeup Mode Due to 0PR31J spike

G. COMPONENT FAILURE DATA:

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