



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

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1)

Docket Number (2)

Page (3)

Braidwood 1

0 | 5 | 0 | 0 | 0 | 4 | 5 | 6 | 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
										0 5 0 0 0

OPERATING
MODE (9)THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENT 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

T. 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 REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15)

[Yes (If yes, complete EXPECTED SUBMISSION DATE)]

X | NO

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 ORT-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 [AB] 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 0VA060Y 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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Braidwood 1	0 5 0 0 0 4 5 6	9 2	-	0 0 7	-	0 0	0 3	OF 0 3					
TEXT Energy Industry Identification System (EIIIS) codes are identified in the text as [XX]													

D. SAFETY ANALYSIS:(continued)

The control circuits for OAR055J 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 ORI-AR056 and IRT-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 OAR55J 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 OPR32J
20-1-87-339/87-051	Spurious Spiking on OPR33J
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 OPR32J For Unknown Reasons
20-1-90-042/90-019	Control Room Ventilation Shift to Makeup Mode Due to OPR31J 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.