



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

June 14, 1994
BW/94-0113

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)(i)(B), which requires a 30-day written report.

This report is number 94-010-00, Docket No. 50-456.

K. L. Kofron
Station Manager
Braidwood Station

KLK/CP/dla
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Encl: Licensee Event Report
No. 456/94-010-00

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

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9406170208 940614
PDR ADOCK 05000456
S PDR

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 1	DOCKET NUMBER (2) 05000456	PAGE (3) 1 OF 4
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TITLE (4) Diesel Generator Declared Inoperable due to a Blown Exhaust Line Rupture Disc

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
05	15	94	94	-- 010 --	00	06	14	94	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) 1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 28		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)	X 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 E. Adams, System Engineering	TELEPHONE NUMBER (Include Area Code) (815)458-2801 x3254
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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
X	EK	DG	C634	Y					

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 15 single-spaced typewritten lines) (16)

The 1A Diesel Generator (DG) was shutdown after receiving a high intake filter ΔP alarm. An investigation of the exhaust line rupture disc and muffler room revealed a blown exhaust rupture disc and the relief on the silencer had lifted. The air intake filters were clogged by DG exhaust and silencer insulation debris. An exhaust header pressure transient occurred which resulted in the blown rupture disc and lifted relief. The cause of the exhaust header pressure transient is currently indeterminate. The 1A DG was declared inoperable with the 2A DG out of service for planned maintenance. Having both of these DGs inoperable required a Technical Specification Action Statement to be entered. A Notice of Enforcement Discretion was received from the NRC to allow for repair of the rupture disc. The rupture disc was replaced and a maintenance run performed successfully. An engine analysis will be performed on the 1A Diesel Generator in an attempt to determine the cause of the event. Pieces of the rupture disc, air filter, and debris particles have been sent away for analysis.

MRC 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 (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.	
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Braidwood 1		05000456	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER
			94	-- 010 --	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: May 15, 1994;					
EVENT TIME: 2123;					
MODE: 1; RX POWER: 28%;					
RCS [AB] TEMPERATURE/PRESSURE: NOT/NOP					
B. DESCRIPTION OF EVENT:					
<p>The 1A Diesel Generator (DG) was started for a normal monthly surveillance run at 0806 on May 15, 1994. Prior to reaching full load, the DG was shutdown at 1042 due to high intake filter ΔP. The intake filters were changed, the DG restarted, and the surveillance recommenced at 1359. At 1809, the high ΔP condition occurred again. The surveillance was completed and the DG shutdown. An investigation of the exhaust line rupture disc and muffler room revealed a blown exhaust rupture disc and the relief on the silencer had lifted. A strong smell of diesel exhaust was present in the area.</p> <p>At 2123, the 1A DG was declared inoperable and the appropriate LCOAR entered. The 2A DG was out of service for planned maintenance and thus both diesel generators were inoperable. Technical Specification 3.8.1.1 Action Statement (c) was entered. This Action Statement requires, in part, that two separate and independent diesel generators be available to provide the unit with A.C. electrical power in Modes 1-4. Action Statement (c) requires that with a Train A Emergency DG inoperable, the other Unit's A DG be verified operable. If these conditions are not satisfied within 2 hours, be in at least Hot Standby within the next 6 hours and in Cold Shutdown within the following 30 hours.</p> <p>To perform corrective maintenance on the damaged rupture disc, Braidwood submitted a request for and received a Notice of Enforcement Discretion (NOED). The NOED granted a 22 hour extension of the 6 hour shutdown requirement of the Action Statement.</p> <p>This event is being reported pursuant to 10CFR50.73(a)(2)(i)(B) - any operation or condition prohibited by the plant's Technical Specifications.</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)

C. CAUSE OF EVENT:

An exhaust header pressure transient occurred which resulted in the blown rupture disc and lifted silencer relief. As a result, DG exhaust and silencer insulation debris clogged the air intake filters. The cause of the exhaust header pressure transient is indeterminate at the present time. Further engine analysis will be performed in an attempt to determine the exact cause of the transient.

Determining exactly when the pressure transient occurred is complicated by the fact that a rupture disk integrity check was missed after the 1042 shutdown. The cause of the missed integrity check was personnel error on the part of the equipment operator assigned to the task.

D. SAFETY ANALYSIS:

This event had no effect on plant or public safety. Bus 241 remained operable and capable of being crosstied to Bus 141 on Unit 1. In the unlikely event that a Loss of Offsite Power would occur, then Bus 241 would be crosstied to Bus 141 to support operation of the Motor Driven Auxiliary Feedwater Pump. Additionally, the 1B Diesel Generator was operable and available to provide emergency power to perform its intended safety function and transient mitigation.

E. CORRECTIVE ACTIONS:

The rupture disc was replaced and a maintenance run was performed successfully. The 1A DG was declared operable at 1940 on May 16, 1994. Disciplinary action was taken against the equipment operator who failed to inspect the rupture disc as required. The rupture discs for the other three DGs were inspected and found to be intact. Additional corrective actions include:

An engine analysis will be performed on the 1A Diesel Generator. This action will be tracked to completion by NTS# 456-180-94-01001.

Pieces of the rupture disc, air filter, and debris particles have been sent away for analysis. Based on the final analysis report, a preventative maintenance schedule will be evaluated for all diesel generators rupture discs. This action will be tracked to completion by NTS# 456-180-94-01002.

NRC FORM 366A (5-92)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95
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TEXT (if more space is required, use additional copies of NRC Form 366A) (17)

E. CORRECTIVE ACTIONS (continued):

The monthly operability surveillance will be revised to request the operator to verify general area cleanliness/loose debris in the exhaust silencer room. This action will be tracked to completion by NTS# 456-180-94-01003.

The annunciator response procedure will be revised to provide additional guidance to check that the rupture disc is intact if the high ΔP alarm comes in. This action will be tracked to completion by NTS# 456-180-94-01004.

Operators will be trained on the purpose of the rupture disc and the need for inspection to verify that the disc remains intact. This action will be tracked to completion by NTS# 456-180-94-01005.

The sealing details for the doors between the DG silencer rooms and air intake plenum will be reviewed in an effort to reduce the potential leak path for DG exhaust and silencer insulation debris. This action will be tracked to completion by Engineering Request Number ER94000276.

F. PREVIOUS OCCURRENCES:

There have been no previous occurrences of this type.

G. COMPONENT FAILURE DATA:

At the present time, no failed DG component(s) have been identified.