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

March 2, 1994
Bw/94-0034

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 requirement of 10CFR50.73(a)(2)(i)(B), which requires a 30-day written report.

This report is number 94-001-00, Docket No. 50-457.

K. L. Kofron
Station Manager
Braidwood Station

Encl: Licensee Event Report
No. 457/94-001-00

cc: NRC Region III Administrator
NRC Resident Inspector
INPO Record Center
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NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

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.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Braidwood 2	05000457	1 OF 4

TITLE (4)
Valves not included in Primary Containment Integrity Verification Surveillance due to Preservice Design Deficiency

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	EAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									None	05000
01	31	94	94	-- 001 --	00	03	02	94	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)					
POWER LEVEL (10)	73	20.402(b)		20.405(c)		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)	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	TELEPHONE NUMBER (Include Area Code)
A. Haeger, Regulatory Assurance	(815)458-2801 x2702

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
				No						

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)

Three Primary Containment Integrity valves were not checked on a monthly basis as required by the Technical Specifications. These valves are not explicitly listed in the Technical Specifications, but are among those required to ensure containment integrity. The root cause of this event is a Preservice Design Deficiency. The original surveillance (written in 1987) did not include these valves. It is suspected that the reason the valves were not on the original procedure was an oversight. This event had no effect on plant or public safety. The valves were immediately verified to be closed in the field, a partial surveillance was performed on the valves to verify isolation, and the surveillance procedure was revised to add the missing isolation devices. There has been a previous occurrence.

A. PLANT CONDITIONS PRIOR TO EVENT:

UNIT: 2; EVENT DATE: January 31, 1994;
EVENT TIME: 0420;
MODE: 1; RX POWER: 73%;
RCS [AB] TEMPERATURE/PRESSURE: NOT/NOP

B. DESCRIPTION OF EVENT:

At 0420 on January 31, 1994, Unit Two was in MODE 1 at 73% reactor power. The monthly surveillance, 2BwOS 6.1.1.a-1, for Primary Containment Integrity Verification of Isolation Devices Outside Containment was being performed. The Equipment Attendant (EA) (non-licensed operator) assigned to complete the field verifications had recently performed the Unit One version of the same procedure. The EA recognized the fact that several valves were different between the two surveillances and questioned the validity of the differences.

The initial investigation by shift personnel revealed that three valves (2SI059A, 2SI059B, and 2RH8733A) were all missing from the surveillance. These valves are not explicitly listed in the Technical Specifications, but are among those required to ensure containment integrity. The valves were immediately verified to be closed in the field. These valves were the only valves considered a legitimate concern. All other differences were variations in the layout of the two units. This information was relayed to the Operating Staff (Ops Staff)for further review and research.

The Ops Staff began to research the problem to find if the checks were required and if they had been in the procedure during previous revisions. They examined the station drawings to find the reasoning for performing this check. They cross referenced with Byron procedures and found that Byron had included the valves on both units. The Ops Staff reviewed all previous revisions of both the Unit Two procedure and the associated Unit One version. It was discovered that the valves had existed in the Unit One procedure since it was first written, but had never been in the Unit Two procedure.

The station drawings were consulted to trace the penetrations associated with these valves. Tracing of the system revealed that the 2SI059A(B) is separated from penetration 92(93) by the 2SI8811A(B), but there is also an alternate path to Penetration 68(75). This path establishes a direct link to the RH loops, which is why nearly all vent and drain valves in the RH system are checked during performance.

B. DESCRIPTION OF EVENT (continued):

The paths in station drawings were checked to ensure all other valves in line with these penetrations are checked on a monthly basis. All other valves that were different between the two procedures were also verified to be correct. Procedure revisions were routed and approved within one shift and partial surveillances were performed to check these valves.

This report is being submitted pursuant to 10CFR50.73(a)(2)(i)(B), which requires the reporting of any operation or condition prohibited by the plant's Technical Specifications.

C. CAUSE OF EVENT:

The root cause of this event is Preservice Design Deficiency. The primary problem was initiated when the original surveillance (written in 1987) did not include these valves. It is suspected that the reason the valves were not on the original procedure was an oversight.

It is thought that the error was first introduced during the initial research and creation of the procedure. Penetration 68 (75 for train B) creates a direct connection from the penetration to the majority of the RH system. To meet the intent of the specification all vent and drain valves in that part of the RH system would have to be checked closed. Almost all of these valves are on system drawing M-137 for Unit 2. There is a parallel path which leads to system drawing M-136-4. It was found that the error occurred here.

The SI valves in question are on drawing M-136-4. On this drawing penetration 92 (93) are also represented. Between the SI059 valves and the penetrations on drawing M-136-4 are the SI8811 valves. The SI8811 valves are automatic isolation valves. It is believed that the procedure originator mistakenly thought the automatic isolation valves would exempt the SI059 valves from being checked. In actuality, both sides of the SI8811 valves are directly connected to penetrations and any vent or drain valve near them would be required to be checked.

The personnel involved in the initial production of this procedure are no longer available for consultation on the subject. Their thought processes in the development of this procedure are therefore based on the resultant procedural evidence and not on personal interviews.

NRC FORM 366A (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

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LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Braidwood 2	05000457	94	-- 001 --	00	4 OF 4

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

D. SAFETY ANALYSIS:

This event had no effect on plant or public safety. The SI059 valves are checked shut on the mechanical lineups prior to power operations after each outage. Additionally, the vent lines associated with these valves are capped to also prevent issuance of fluid. The only predicament presented is that the valves were not checked on a monthly basis as required by the Technical Specifications.

E. CORRECTIVE ACTIONS:

The valves were immediately verified to be closed in the field.

A partial surveillance was performed to verify isolation of valves.

Braidwood Operating Surveillance, 2BwOS 6.1.1.a-1, Unit Two Primary Containment Integrity Verification of Isolation Devices Outside Containment, was revised to add the missing isolation devices 2SI059A, 2SI059B, and 2RH8733A. This action was completed on 1/31/94.

F. PREVIOUS OCCURRENCES:

There has been a previous occurrence in which Technical Specification surveillances have not been performed within the specified frequency as a result of procedural deficiencies involving missed components.

Ler No.	*Title*
50-456/92-009	LER 1-92-009; UNTESTED UNDERVOLTAGE RELAY CONTACTS DUE TO PROCEDURAL DEFICIENCY

G. COMPONENT FAILURE DATA:

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