Commonwealth Edison Company Braidwood Generating Station Route #1, Box 84 Braceville, IL 60407-9619 Tel 815-458-2801



September 25, 1995 BW/95-0094

Document Control Desk U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Gentlemen:

The enclosed Licensee Event Report from Braidwood Generating Station is being transmitted in accordance with the requirement of 10 CFR 50.73(a)(2)(v), which requires a 30-day written report.

This report is number 95-010-00, Docket No. 50-456.

Yours truly,

T.J. Tulon Station Manager Braidwood Nuclear Station

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Encl: Licensee Event Report No. 456-95-010-00

cc: NRC Region III Administrator NRC Resident Inspector INPO Record Center ComEd Distribution Center I.D.N.S. I.D.N.S. Resident Inspector



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MRC FOR (5-92)	M 366		PNGPP	U.S	NUCLEAR	REGULA	TORY CO	MMISSION	ESTIMAT THIS I	APPROVED B EXP ED BURDEN P NFORMATION CO	Y OMB NO. IRES 5/31, ER RESPON	3150-0 /95 SE TO REQUES	104 COMPLY WI1 1: 50.0 HR	
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FACILITY NAME (1) Braidwood 1								DOCKET NUMBER (2) PAGE ( 05000456 1 OF 5				PAGE (3) OF 5		
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On 8/24/95 Systems Engineering Department began a review of surveillance requirements associated with Technical Specification 3.5.2.g.2, dealing with verifying the position of mechanical stops on Safety Injection system throttle valves. The review centered around a Byron event from 1990 where there was occurrence of an ECCS throttle valve found out of position. On 8/28/95 it was recognized that when the applicable Unit 1 procedure was revised it contained the incorrect valve settings for the SI system. Had the valves been set in accordance with the procedure as written (which they had not been), there is a possibility that the Safety Injection system would not have performed as designed. The cause was an inadequate revision of the affected procedure. To solve the problem, revisions to both the Unit 1 and 2 procedures are being made to specify the best method by which the mechanical position stops are verified. These procedures will be in place before their next use. The System Engineering department is also investigating alternate methods to perform this surveillance and methods to establish better records of the throttle valve positions. There have been no previous occurrences of similar problems at Braidwood.

HRC FORM 366 (5-92)

NRC 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

LICENSEE EVENT REPORT (LE TEXT CONTINUATION	ER)	ESTIMAT THIS II FORWARD THE IN (MNBB 7 WASHING REDUCTI MANAGEM	ED BURDEN PER NFORMATION COLLI COMMENTS REGA FORMATION AND F 714), U.S. NUCLI TON, DC 20555-0 ON PROJECT IENT AND BUDGET,	RESPONSE ECTION REQU REDING BURD RECORDS MAN EAR REGULAT 1001, AND TH (3150-0104) WASHINGTON	TO COMPLY WITH JEST: 50.0 HRS. EN ESTIMATE TO IAGEMENT BRANCH ORY COMMISSION, D THE PAPERWORK , OFFICE OF , DC 20503.
FACILITY NAME (1)	DOCKET NUMBER (2)		LER NUMBER (6	)	PAGE (3)
Braidwood 1		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 5
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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: August 28, 1995; Event Time: 1550; 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 that contributed to the severity of the event.

On August 24, 1995 Systems Engineering Department began a review of surveillance requirements associated with Technical Specification 3.5.2.g.2. This surveillance verifies, on an eighteen month interval, the correct position of each mechanical position stop for a number of Safety Injection (SI)[ ] valves. The review centered around an event at Byron where there was an identified occurrence on September 28, 1990. Byron had found an ECCS throttle valve locked closed instead of locked throttled, and considered it necessary to change their method of performing the surveillance of these valves.

As a preventive measure, Braidwood recognized at the time that their procedures could conceivably allow a similar event to occur. Surveillance 18w0S 5.2.g.1-1, ECCS Mechanical Position Stop Surveillance, was revised to verify the actual valve position, as measured by stem height, for each throttle valve in the SI system. However, at 1550 on August 28, 1995 it was identified that the stem height values that were presented in a table in the procedure were incorrect. All twelve valves listed in the procedure were listed as having the same valve stem height. This is a discrepancy since the values for each throttle valve were left different at the end of the ECCS full flow test at the end of refueling outage A1R04 in April 1994. The corresponding surveillance on Unit 2 was checked and was verified to not have the same problem.

An ENS notification of the problem with the Unit One acceptance criteria was made at 1637 CDST on 8/28/95 in accordance with 10 CFR 50.72(b)(2)(iii)(D), which requires the licensee to notify the NRC as soon as practical and in all cases, within four hours of the occurrence of any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.

NRC FORM 366 (5-92)

NRC FORM 366A (5-92)	U.S. NU	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95					
LICI	ICENSEE EVENT REPORT (LER) TEXT CONTINUATION			TED BURDEN PER NFORMATION COLL D COMMENTS REGA FORMATION AND 7714), U.S. NUCL GTON, DC 2055-C ION PROJECT MENT AND BUDGET,	TO COMPLY WITH JEST: 50.0 HRS. EN ESTIMATE TO VAGEMENT BRANCH ORY COMMISSION, O THE PAPERWORK , OFFICE OF , DC 20503.		
FA	FACILITY NAME (1) DOCKET NUMBER (2)					PAGE (3)	
Braidwood 1		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

This event is being reported pursuant to 10CFR50.73(a)(2)(v) any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.

### C. CAUSE OF THE EVENT:

The cause of this event was Personnel Error, in that the revision of the procedure affected was inaccurate. When procedure 1BwOS 5.2.g.1-1 was revised in March of 1993, the acceptance criteria that was added was incorrect. The settings for the throttle valves were shown as all having the same measurement. In comparison of the as-left positions of the valves with the positions listed in the procedure, the current System Manager determined that the procedure was incorrect. At some point during the review of the last revision, the information was not presented properly. A minimum of three people reviewed the final copy of the new revision and missed the fact that the acceptance criteria issue was not correct.

#### D. SAFETY ANALYSIS:

This event had no effect on plant or public safety. Full flow testing, performed during all outages since the discovery of the potential for error, have confirmed that the system is functioning properly. Upon discovery of the potential problem, an Operability Determination (CD) was performed by System Engineering. This OD determined that the valves were currently in the correct position through a review of the previous ECCS Full Flow Tests, work history on the valves, the last performance of the Mechanical Position Stop Surveillance, the containment entry log, and the locked valve key log. NRC FORM 366 (5-92)

NRC 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

LICENSEE EVENT REPORT (I 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 (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUGGET. WASHINGTON, DC 20503.					
FACILITY NAME (1)	DOCKET NUMBER (2)		LER NUMBER (6	)	PAGE (3)	
Braidwood 1		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	1 - 6 5	
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17) E. CORRECTIVE ACTIONS:

> Immediate actions were to have System Engineering perform an Operability Determination to confirm that the Unit 1 valves were in the correct position. This was completed satisfactorily.

Further corrective actions were as follows:

Surveillances 1BwOS 5.2.g.1-1 and 2BwOS 5.2.g.1-1 (ECCS Mechanical Position Stop Surveillances) will be revised to maintain a consistent approach to the procedures. Discussions with the System Manager were held to clarify the expected actions of the operating personnel. These actions will outline the method of checking the throttle valve for the station to be assured of correct positioning. This verification will assure that the intent of the Technical Specifications has been fully addressed. Completion of these two procedure revisions will be tracked to completion by commitment 456-180-95-01001, and will be completed before the procedure is performed during the next refuel outage on either unit.

Procedures BwOP SI-M1 and BwOP SI-M2 (Operating Mechanical Lineups Units 1 and 2) are being reviewed. Discussions with the System Manager identified the need to improve the method of checking the throttle valve during a mechanical line up for the station to be assured of correct positioning. This action will be tracked to completion by commitment 456-180-95-01002.

The System Engineering department is investigating alternate methods to perform this surveillance. The requirements to verify the throttle valve positions may possibly be accomplished during the full flow test with a meager extension of the work required. The addition of these steps to this test may also reduce the amount of radiation exposure to personnel at the station. The System Manager is currently determining if the benefits of this action are valuable. This action will be tracked to completion by commitment 456-180-95-01003.

The System Engineering department is examining methods to establish better records of the throttle valve positions. The addition of a surveillance which records these values periodically is being considered. The System Manager is currently determining if the benefits of this action have merit. This action will be tracked to completion by commitment 456-180-95-01004.

NRC FORM 366A (5-92)	U.S. NUCLEAR RE	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95					
LICENSEE E TEXT	ER)	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 2053.					
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

## F. PREVIOUS OCCURRENCES:

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There have been no previous occurrences of procedure deficiencies that, if performed, could have led to a safety system becoming inoperable.

# G. COMPONENT FAILURE DATA:

This event was neither the result of a component failure nor did any components fail as a result of this event.