

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Kewaunee Nuclear Power Plant										DOCKET NUMBER (2) 0 5 0 0 0 3 0 5 1 0 0 2					PAGE (3) 1 OF 2	
TITLE (4) Reactor Trip Due to a Loss of Power on Instrument Bus IV																
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	0 3	8 4	8 4	0 1 4	0 0 0	8 0	2 8	4	NA				0 5 0 0 0 0			
OPERATING MODE (9) N			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following) (11)													
POWER LEVEL (10) 1 9 0			20.402(b)				20.406(e)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				73.71(b)	
			20.406(a)(1)(i)				50.36(e)(1)				<input type="checkbox"/> 50.73(a)(2)(v)				73.71(c)	
			20.406(a)(1)(ii)				50.36(e)(2)				<input type="checkbox"/> 50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)	
			20.406(a)(1)(iii)				50.73(a)(2)(iii)				<input type="checkbox"/> 50.73(a)(2)(viii)(A)					
			20.406(a)(1)(iv)				50.73(a)(2)(iii)				<input type="checkbox"/> 50.73(a)(2)(viii)(B)					
			20.406(a)(1)(iv)				50.73(a)(2)(iii)				<input type="checkbox"/> 50.73(a)(2)(ix)					
LICENSEE CONTACT FOR THIS LER (12)																
NAME Mark Marchi - Technical Support Superintendent										TELEPHONE NUMBER 4 1 4 3 8 8 - 2 5 6 1 0						
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS						
X	E I F	I N V T	W 1 2 0	YES												
SUPPLEMENTAL REPORT EXPECTED (14)																
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO		EXPECTED SUBMISSION DATE (15) NA		MONTH	DAY	YEAR

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

At 1832 on 7/3/84 a loss of power occurred on Instrument Bus IV, the yellow protection channel. This resulted in a partial loss of instrumentation, various alarms and level control problems on the Steam Generators. The operators took manual control of the Steam Generators, but could not prevent a Reactor Trip from Lo S/G Level coincident with Steam Flow/Feed Flow mismatch on S/G 'B', which occurred approximately 3 minutes after the power failure. The Reactor Trip procedure was followed and a "Post Trip Review" was performed.

Investigation on July 5 found a loose connection (CON) on the line side of the AC output breaker (52) compression type connector. It is felt that vibration over a period of time caused this connection to loosen allowing the two wires at this point to momentarily separate. This momentary separation caused the Instrument Bus voltage to drop to approximately 100 volts; upon remake of the connection Instrument Bus voltage returned to normal 118 volts AC. This condition was duplicated by plant electricians, thus verifying the cause of a momentary low voltage on Instrument Bus IV. Preventative Maintenance Procedures on DC equipment have been revised to include the Instrument Bus Inverters; this should be adequate to prevent a recurrence.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1) Kewaunee Nuclear Power Plant	DOCKET NUMBER (2) 0 5 0 0 0 3 0 5	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 4	— 0 1 4	— 0 0	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 365A's) (17)

At 1832 on 7/3/84 a loss of power occurred on Instrument Bus IV (BU). This was noted in the Control Room by the loss of indication on all the yellow protective channel instruments. These instrument failures caused various alarms (ALM) and made up partial reactor trip logic indications. It also caused a level control problem on the Steam Generators (SG). The operators took manual control of the Steam Generators, but could not prevent a Reactor Trip from Lo S/G level coincident with Steam Flow/Feed Flow mismatch on S/G 'B', which occurred approximately 3 minutes after the power failure. Procedures for Reactor Trip were properly followed.

The battery room was checked for indications (fire, etc.) or cause for the power failure. By the time personnel arrived in the battery room, power had returned and there was no indication of any abnormal lineup or tripped circuit breakers (BKR). Later investigation of SER printout showed that power had returned at 1838. An electrician was called in to check the operation of the Inverter (INVT), but could find nothing abnormal.

The Assistant Superintendent of Operations came in and together with the STA and Shift Supervisor performed the "Post Trip Review". Their discussions included a call to the Maintenance Superintendent/acting Plant Manager and an agreement was reached to supply power to Instrument Bus IV from the alternate power supply (BRA-105), and to de-energize the Inverter. This was accomplished approximately two hours after the trip and the plant was ready for a return to power.

Investigation on July 5 found a loose connection (CON) on the line side of the AC output breaker (52) compression type connector. It is felt that vibration over a period of time caused this connection to loosen allowing the two wires at this point to momentarily separate. This momentary separation caused the Instrument Bus voltage to drop to approximately 100 volts; upon remake of the connection Instrument Bus voltage returned to normal 118 volts AC. This condition was duplicated by plant electricians, thus verifying the cause of a momentary low voltage on Instrument Bus IV. Preventative Maintenance Procedures on DC equipment have been revised to include the Instrument Bus Inverters; this should be adequate to prevent a recurrence.

WISCONSIN PUBLIC SERVICE CORPORATION



P.O. Box 1200, Green Bay, Wisconsin 54305

August 2, 1984

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

Gentlemen:

Docket 50-305
Operating License DPR-43
Kewaunee Nuclear Power Plant
Reportable Occurrence 84-014-00

In accordance with the requirements of 10 CFR 50.73 "Licensee Event Report System", the attached Licensee Event Report for reportable occurrence 84-014-00 is being submitted.

Very truly yours,

A handwritten signature in dark ink, appearing to read "D. C. Hintz".

D. C. Hintz
Manager - Nuclear Power

JGT/js

Attach.

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