

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Kewaunee Nuclear Power Plant	DOCKET NUMBER (2) 05000305	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)
07	03	84	84	014	000	08	02	84	NA		050000
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following) (11)											

OPERATING MODE (9) N	20.402(b)	20.406(c)	<input checked="" type="checkbox"/>	80.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 1190	20.406(a)(1)(i)	80.36(e)(1)	<input type="checkbox"/>	80.73(a)(2)(v)	73.71(c)
	20.406(a)(1)(ii)	80.36(e)(2)	<input type="checkbox"/>	80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.406(a)(1)(iii)	80.73(a)(2)(iii)	<input type="checkbox"/>	80.73(a)(2)(viii)(A)	
	20.406(a)(1)(iv)	80.73(a)(2)(iii)	<input type="checkbox"/>	80.73(a)(2)(viii)(B)	
	20.406(a)(1)(iv)	80.73(a)(2)(iii)	<input type="checkbox"/>	80.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Mark Marchi - Technical Support Superintendent	TELEPHONE NUMBER 414 388-2560
--	----------------------------------

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NPROS
X	E F	I N V T	W L 2 0	YES					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15) NA

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.

8408080033 840802
PDR ADOCK 05000305
S PDR

IE 22

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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 366A'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.

cc - INPO Records Center
Suite 1500, 1100 Circle 75 Parkway
Atlanta, GA 30339
Mr. Robert Nelson, NRC Resident Inspector
RR #1, Box 999, Kewaunee, WI 54216
Mr. S. A. Varga, Chief
US NRC, Washington, DC 20555
Mr. J. G. Keppler, Regional Administrator
Region III, US NRC, 799 Roosevelt Road
Glen Ellyn, IL 60137

IE22
1/1