

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Kewaunee Nuclear Power Plant										DOCKET NUMBER (2) 0 5 0 0 0 3 0 5					PAGE (3) 1 OF 0 2		
TITLE (4) Reactor Trip on Intermediate Range Hi Flux																	
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 NA				DOCKET NUMBER(S) 0 5 0 0 0				
0 5	0 5	8 4	8 4	0 0 8	0 0	0 6	0 4	8 4					0 5 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) 0 0 0		20.402(b)				20.405(c)				X 80.73(a)(2)(iv)				73.71(b)			
		20.405(a)(1)(i)				80.36(c)(1)				80.73(a)(2)(v)				73.71(c)			
		20.405(a)(1)(ii)				80.36(c)(2)				80.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)			
		20.405(a)(1)(iii)				80.73(a)(2)(ii)				80.73(a)(2)(viii)(A)							
		20.405(a)(1)(iv)				80.73(a)(2)(iii)				80.73(a)(2)(viii)(B)							
		20.405(a)(1)(v)				80.73(a)(2)(iv)				80.73(a)(2)(ix)							
LICENSEE CONTACT FOR THIS LER (12)																	
NAME Sherry Bernhoft - Plant Technical Support Engineer										TELEPHONE NUMBER AREA CODE 4 1 4 3 8 8 - 2 5 6 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	I	G	D	E	T	W	1	2	0	Y							
SUPPLEMENTAL REPORT EXPECTED (14)																	
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO		EXPECTED SUBMISSION DATE (15) NA		MONTH	DAY	YEAR	

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

On May 5, 1984, with the plant in a hot shutdown mode for post refueling physics testing, an Intermediate Range Hi Flux Reactor Trip was received on channel N35. The operators performed the immediate actions prescribed in the Reactor and Turbine Trip procedure, placed N35 out of service and continued with physics testing.

Investigation revealed that the trip was due to a faulty detector. Source and Intermediate range detector failure is a reoccurring problem that is noted after almost every refueling outage. An engineering study is underway to determine possible corrective actions.

The reactor protection system performed its required function, hence there was no impact on public health and safety.

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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)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Kewaunee Nuclear Power Plant	0500030584	—	008	—00	02	OF 02

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

On May 5, 1984, with the plant in a hot shutdown mode for post refueling physics testing, an Intermediate Range Hi Flux Trip was received on channel N35 (IG). The trip was received during the initial approach to criticality by dilution when the setpoint for P-6, the permissive which allows blocking the source range, was reached. The operators performed the immediate actions prescribed in the Reactor and Turbine trip procedure, placed N35 out of service and continued with the physics testing.

Investigation revealed that the trip was due to a faulty detector (DET). The inner-to-outer shell resistance on the compensated ion chamber was approximately half of its normal value which resulted in a noisy signal. When the setpoint for P-6 was reached, the bistable (RLY) cycled on and off causing the control power fuses (FU) for the detector to blow. The following day the detector was replaced.

Source and Intermediate range detector failure is a reoccurring problem noted after almost every refueling outage due to water leakage past the boot seal. The sealing surface in the boot seal has been examined and it appears that there is no way we can expect a one hundred percent leak tight system. Other corrective actions we are looking into include, increasing the amount of RTV used to seal the boot, putting covers over the detectors, and purchasing a new type of detector.

The reactor protection system performed its required function, hence there was no impact on public health and safety.

WISCONSIN PUBLIC SERVICE CORPORATION



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

June 4, 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 84-008-00

In accordance with the requirements of 10 CFR 50.73 "Licensee Event Report System", the attached Licensee Event Report for reportable occurrence 84-008-00 is being submitted.

Very truly yours,

A handwritten signature in cursive script, appearing to read "C. W. Giesler".

C. W. Giesler
Vice President - Power Production

JGT/jks

Attach.

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