NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Kewaunee Nuclear Power Plant	0 5 0 0 0 3 0 5	1 OF 0 3

TITLE (4)
Potential Loss of Both Trains of the Shield Building Vent System

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 3	1 3	8 4	8 4	0 0 1	0 0	0 4	1 2	8 4	NA	0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 8 3	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		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
Jeffrey Giesler - Associate Engineer John Thorgersen - Nuclear Engineer	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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
A											

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO	NA			

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

At 0905 on March 13, 1984, with the plant at 83% power, the Shield Building Vent System (SBVS) train "B" exhaust fan was tagged out for performance of Surveillance Procedure SP-08-185," Charcoal Filter Heat Detector Test". Maintenance personnel inadvertently initiated the surveillance on train "A", making it inoperable. Because the "B" train had not been demonstrated operable with the exhaust fan out of service prior to commencing work on train "A", both trains of the SBVS were considered out of service.

This condition went unnoticed until approximately 1000 when the maintenance personnel completed their work, and notified the Control Room. At this time, the error was identified. Train "B" was returned to its normal configuration at 1007, demonstrated to be operable, and returned to service at 1015.

A conservative determination was made to report the incident per 10CFR 50.72(b)(2)(iii).

The Surveillance Procedure was completed with both trains being back in service at 1133.

To prevent a recurrence of this event, the SBVS filter housings have been marked so they can be readily identified. Also, the surveillance procedure is being revised.

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

With the plant operating at 83 percent power on March 13, 1984, initiation of surveillance work in violation of a procedure placed the Shield Building Vent System (VC) in a condition such that both trains of this system were considered out of service. At 0905, the train "B" exhaust fan (FAN) was removed from service for performance of Surveillance Procedure SP-08-185, "Charcoal Filter Heat Detector Test". The train "B" recirculation fan (FAN) remained in the automatic position. At this time, the maintenance personnel inadvertently initiated the surveillance on train "A". By procedure the heat sensor was removed at 0908. This sent a lockout signal to both of the the train "A" fans. This lockout signal must be reset before the fans can be started from the Control Room. Since the "B" train had not been demonstrated operable in its existing alignment, both trains of the Shield Building Vent System were conservatively considered to be out of service.

Control Room indication which should have resulted from this action are the following:

- Fire Protection Status Light (IL)449010804; "Shops/Air Cond. Equip. Fire"
- Sequence of Events Recorder (AR)49001068; "FP, Shops/Air Cond. Equip. Fire"
- Sequence of Events Recorder 49001079; "FP, Status Light Equip. Fail".
- Fire Alarm (FRA)4700125
- Trouble Alarm (ALM)4700135
- Safety Injection - Ready Status Light 449090201; "SBV Exh. Fan 1A Trip Not Reset"
- Safety Injection - Ready Status Light 449090203: "SBV Rec. Fan 1A Trip Not Reset"

The fire status light, the two SER's, and the two alarms gave indication as expected when the heat sensor was removed. Because these indicators are common to both trains of the system, this did not alert the operators that the wrong train was being tested.

The two Safety Injection Status Lights are located on the active status panel. When the system is in its proper alignment, these are dimly lit. When the system alignment is changed (in this case, locking out the train "A" fans), the lights turn brighter. Unless an operator is looking directly at these lights, he may not notice which train changed status. In this case, the procedure did not call for operator verification of these two lights, and the status change went unverified. Had this verification been required, the error could have been identified immediately.

The system remained in this condition until approximately 1000. The maintenance personnel completed their work, and notified the Control Room Operators that they were done with work on train "A". At this time, the error was recognized. Train "B" was restored to its normal configuration at 1007, demonstrated to be operable, and returned to service at 1015. The total time of the incident was about 1 hour and 15 minutes, while the time from discovery to return to service was about 15 minutes.

The surveillance procedure was then completed, and both trains were back in service at 1133.

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

The consequences of this event on plant safety were not significant. The function of this system is to recirculate the annulus air through a series of filters while at the same time, exhausting just enough air to establish and maintain a slight vacuum in the shield building. The major portion of this function is performed by the 5000 standard cubic feet per minute (SCFM) recirculation fans. The smaller 200 SCFM exhaust fans aid in the maintaining of the vacuum. Although train "B" was not proven to be operable in this configuration, there is no reason to believe it would not have been capable of performing its safeguard function.

In an effort to prevent a recurrence of this type of event, several corrective actions have been or will be taken:

1) The personnel involved were counseled on the significance of this event;

2) The system filter housings have been more clearly marked so that they can be readily identified;

3) A separate surveillance procedure will be developed for each of the three systems now covered by SP-08-185; and

4) The new procedure will:

   - more clearly distinguish the system components to be tested during the surveillance;

   - include requirements for operator verification of changes in status lights on the Safety Injection Active Status Panel; and

   - include provisions for sign off and independent verification of steps which affect the operability of the deluge systems.

No similar events have been experienced.

NRC-84-60

WISCONSIN PUBLIC SERVICE CORPORATION

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

April 12, 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 84-001-00

In accordance with the requirements of 10 CFR 50.73 "Licensee Event Report System," the attached Licensee Event Report for reportable occurrence 84-001-00 is being submitted.

Very truly yours,

C. W. Giesler
Vice President - 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

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