WOLF CREEK
NUCLEAR OPERATING CORPORATION

Clay C. Warren
Chief Operating Officer

September 11, 1996

WO 96-0131

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D. C. 20555

Subject: Docket No. 50-482: Licensee Event Report 96-008-00

Gentlemen:

The above identified Licensee Event Report (LER) is being submitted in accordance with 10CFR50.73(a)(2)(i)(B). This LER documents Wolf Creek Nuclear Operating Corporation's failure to maintain the operability of the Essential Service Water Room Ventilation.

If you should have any questions regarding this submittal, please contact me at (316) 364-8831, extension 4485, or Mr. Terry S. Morrill at extension 8707.

Very truly yours,

Clay C. Warren

Clay C. Warren

CCW/jad

Attachment

cc: L. J. Callan (NRC), w/a
W. D. Johnson (NRC), w/a
J. F. Ringwald (NRC), w/a
J. C. Stone (NRC), w/a

IE22

NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

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 PAPERWORD REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
WOLF CREEK GENERATING STATION	05000482	1 OF 5

TITLE (4)

Inoperability of Essential Service Water Room Ventilation

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
05	16	96	96	008	00	09	11	96	FACILITY NAME	DOCKET NUMBER

OPERATING	1
POWER	100%

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

	20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)
	20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)
	20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)	X	OTHER
	20.405(a)(1)(iii)	X	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 (Include Area Code)
Terry S. Morrill Manager Regulatory Services	316-364-8831, extension 8707

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
N/A										

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

ABSTRACT:

On May 16, 1996, troubleshooting Work Package (WP) 112603 was initiated on the computer point for the "A" Train Essential Service Water (ESW) room temperature indicator. The Control Room reviewed and approved the work package to be worked. At approximately 1035 on May 16, 1996, as part of WP 112603, surveillance procedure STN IC-465, "Channel Calibration ESW Pump Room Temperature Control Loop," was commenced on the "A" Train ESW supply fan; this procedure lifted lead RP053AC for the fan, keeping the fan from starting on any signals, thus causing the ESW train "A" to be inoperable. It was not recognized that this procedure affected the operability of the ESW fan. Technical Specification 3.7.4 should have been entered; additionally, Technical Specification surveillance 3.8.1.1 should have been performed when the ESW train was inoperable for greater than one hour. The Diesel Generator Technical Specification 3.8.1.1 for the "A" Train should have been entered.

On May 17, 1996, the troubleshooting activities on the computer point were continued, with the lifting of lead RP053AC. This again made the ESW "A" supply fan inoperable. Coinciding with these events, an oil line broke on the Control Building Air Conditioner unit, SGK04B, which caused the "B" train Control Room Emergency Ventilation System (CREVS) to be inoperable. Therefore, both "A" and "B" trains of CREVS were inoperable for ten to fifteen minutes, contrary to Technical Specification 3.7.6, and Technical Specification 3.0.3 should have been entered.

Plant Conditions At the Time of the Event:
Operational Status: Mode 1
Reactor Coolant Pressure: 2234 psig pressurizer pressure
Reactor Power: 100%

Basis for Reportability:

Technical Specification 3.8.1.1 states that two separate and independent diesel generators shall be operable in Mode 1. Contrary to this condition, the loss of the "A" train ESW supply fan during troubleshooting caused the ESW pump PEF01A to be inoperable, which caused the "A" train diesel generator to also be inoperable. Technical Specification action statement 3.8.1.1, action b, requires a demonstration of the " . . . OPERABILITY of the offsite A.C. sources by performing Specification 4.8.1.1.1 within 1 hour . . . and of the remaining OPERABLE diesel generator by performing Specification 4.8.1.1.2a.4 within 24 hours. . . ." These actions were not performed.

Technical Specification 3.7.6 states that "Two independent Control Room Emergency Ventilation Systems shall be OPERABLE." Contrary to this, for ten to fifteen minutes on May 17, 1996, both trains of emergency ventilation system were inoperable.

Technical Specification 3.0.3 states that "When a Limiting Condition for Operation is not met . . . within one hour, action shall be initiated to place the unit in a mode in which the specification does not apply. . . ." Contrary to this, the Limiting Condition for Operation was not recognized, and the unit continued to operate in Mode 1, 100% power.

Therefore, this event is reportable per 10 CFR 50.73(a)(2)(i) (B).

Description of Event:

On May 16, 1996, Work Package (WP) 112603 was issued to troubleshoot a 6 degree difference between the computer point and the local temperature indication for the "A" Train ESW Room Temperature. The WP was marked non nuclear safety-related (NNSR). In accordance with AP 16C-002, "Work Controls," troubleshooting is limited to work activities that will not cause entry into a Technical Specification Limiting Condition for Operations (LCO). The Instrumentation and Control (I&C) technicians went to the Control Room to discuss the WP and the troubleshooting that was going to take place. The shift supervisor believed that the operability of the ESW supply fan was not going to be affected. As part of the WP, STN IC-465, "Channel Calibration ESW Pump Room Temperature Control Loop," was to be run. It was not recognized by the Control Room or the I&C technicians that this procedure would make the ESW supply fan inoperable.

At approximately 1035, to continue troubleshooting on May 16, 1996, surveillance procedure STN IC-465 was initiated on the "A" Train ESW supply fan system. The procedure lifted lead in cabinet RP053AC for the fan, keeping the fan from starting on any signals. The procedure did not identify this action as affecting the operability of the ESW fan. Technical Specification Clarification 001-89 states, "For all safety-related room coolers, (to include D/G and ESW pump supply fans) the coolers must be OPERABLE for the related equipment to be OPERABLE. . . This includes the fan OPERABLE . . . . " Therefore, the appropriate Technical Specification 3.7.4 should have been entered.

On May 17, 1996, I&C continued troubleshooting the original temperature indicator problem. According to the troubleshooting sheet of WP112603-1, the lead in RP053AC was again lifted. Thus, the ESW "A" supply fan and ESW system were inoperable again for a short period of time. The lifted lead RP053AC was relanded, but no Limiting Condition for Operation (LCO) was entered. The next step of troubleshooting involved using a decade box to adjust the dampers. The decade box can set up a resistance to simulate a low enough temperature tc keep the fan from starting (low temperature cut-out). If the fan is not capable of running, the system is inoperable.

During the time the "A" ESW system was inoperable on May 17, 1996, an oil line broke on the Control Building Air Conditioner Unit, SGK04B, making the equipment inoperable. Therefore, with maintenance being performed on "B" train Control Room air conditioning unit and the "A" train being inoperable because of the troubleshooting activities, the combination of these two circumstances should have caused the plant to enter Technical Specification 3.0.3.

The operability issue with the performance of STN IC-465 was not recognized until August 13, 1996, when an I&C supervisor approached the Central Work Authority (CWA) with a similar question as had been presented on May 16, 1996. On August 12, 1996, two technicians went to the Control Room for permission to perform STN IC-465 on "A" Train ESW. The shift supervisor and the shift engineer discussed the procedure with the two technicians. The shift supervisor had a concern with the lifting of the lead in RP053AC because it would prohibit the ESW fan from starting. The shift supervisor requested to have the procedure performed during a scheduled LCO for the "A" ESW system. The question of the work performed in May, 1996, was discussed, and found to have been outside the allowed Technical Specifications.

Root Cause and Corrective Actions:

Root Cause:

The root cause of this event is an inadequate procedure. Procedure STN IC-465, "Channel Calibration ESW Pump Room Temperature Control Loop," did not identify that performance of this procedure would render the ESW ventilation system inoperable. The procedure indicated that it could be performed in any mode of operation, and did not contain precautions relative to an impact on the ESW ventilation system.

Contributing Factor:

1. Discussions between I&C and the shift supervisor prior to the performance of STN IC-465 did not reveal chat the scope of work had changed and that more than just the computer point would be disabled.

Corrective Actions:

Immediate:

1. STN IC-465 was revised to include cautions that during the performance of this procedure, the supply fan will be inoperable.

2. The importance of clear communications with the shift supervisor, and the importance of understanding the effects of the work they perform on equipment operability have been emphasized during I&C group meetings.

Long-term:

1. All I&C STNs will be reviewed for potential impact to equipment operability, prior to any use. This review will be completed entirely by September 20, 1996.

2. A checklist of questions and considerations will be generated that the shift supervisor and Work Control Center should ask when a troubleshooting request, or a request to perform a procedure, is received to help ensure complete communication takes place, and to address operability questions. This checklist will be utilized until such time as WCNOC determines that this interim measure is no longer of value. The checklist will be completed by September 16, 1996.

Safety Significance:

If automatic actuation of the ESW pump occurred, the supply fan would not have started automatically to maintain the ESW pumphouse within 50 degrees and 122 degrees Fahrenheit. However, I&C technicians were located at the ESW pumphouse monitoring pumphouse temperatures, and could have restored automatic control of the ventilation system within approximately 10 minutes. During the troubleshooting on May 16 and May 17, 1996, the ambient temperature conditions at the time of the disabling did not require the fan to operate. Therefore, the safety significance is considered low.

Other Previous Occurrences:

None.