WOLF CREEK
NUCLEAR OPERATING CORPORATION

Clay C. Warren
Vice President Operations Support

JAN 12 2000

WO 00-0001

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 1999-015-00

Gentlemen:

The enclosed Licensee Event Report (LER) 1999-015-00 is being submitted, pursuant to 10 CFR 50.73(a)(2)(i), regarding the identification by Wolf Creek Nuclear Operating Corporation(WCNOC) personnel of a failure to comply with the requirements of Wolf Creek Technical Specification 3.5.2.

The attachment to this letter identifies actions committed to by Wolf Creek Nuclear Operating Corporation in the enclosed LER.

If you should have any questions regarding this submittal, please contact me at (316) 364-4048, or Mr. Michael J. Angus at (316) 364-4077.

Very truly yours,

Clay C. Warren

ccw/rlr

Enclosure

Attachment

cc: J. N. Donohew (NRC), w/e, w/a
W. D. Johnson (NRC), w/e, w/a
E. W. Merschoff (NRC), w/e, w/a
Senior Resident Inspector (NRC), w/e, w/a

IE22

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION
(6-1998)

LICENSEE EVENT REPORT (LER)

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

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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

TITLE (4)

Failure to Comply with the Requirements of Technical Specification Limiting Condition of Operation 3.5.2 due to Inadequate Verification

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
12	14	1999	1999	015	00	01	12	2000	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	MODE 1
POWER LEVEL (10)	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)		OTHER
	20.405(a)(1)(iii)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		Voluntary
			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)
Michael J. Angus Manager Licensing and Corrective Action	(316) 364-4077

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES	X	NO				

ABSTRACT (16):

On December 14, 1999, Wolf Creek Generating Station personnel identified that on February 11, 1999, while Wolf Creek Generating Station (WCGS) was in Mode 1 at 100% power, a combination of maintenance activities resulted in a condition prohibited by Technical Specification 3.5.2 for eight minutes. At the time this event occurred, Wolf Creek Nuclear Operating Corporation (WCNOC) personnel failed to comply with Technical Specification 3.5.2 and also failed to enter Technical Specification 3.0.3, as required. The root cause of this event was inadequate identification of components capable of affecting operability of multiple Emergency Core Cooling System (ECCS) trains and the absence of a programmatic mechanism to prevent activities incompatible with plant conditions from occurring on these components. Corrective actions include review for generic applications and impact, procedure and form revisions, and training. Interim corrective actions include the implementation of operator aids. This event was determined to be of minimal safety significance because there was no loss of safety function.

Plant Conditions Prior to the Event:

Mode -- 1
Power -- 100 percent
Temperature -- 586.2 degrees Fahrenheit
Pressure - 2238.2 pounds per square inch gauge

Basis for Reportability:

WCGS Technical Specification 3.5.2 requires that two independent Emergency Core Cooling Systems (ECCS) be operable with each subsystem comprised of:

- One operable centrifugal charging pump (CCP),
- One operable Safety Injection (SI) pump,
- One operable Residual Heat Removal (RHR) heat exchanger,
- One operable Residual Heat Removal pump, and
- An operable flow path capable of taking suction from the refueling water storage tank on a Safety Injection Signal and automatically transferring suction to the containment sump during the recirculation phase of operation.

The Wolf Creek Generating Station (WCGS) Technical Specifications require capability of the required RHR pump to take a suction from the Containment Sumps and supply suction to required CCP and SI pumps during the recirculation phase of Emergency Core Cooling System (ECCS) operation. In this instance, the "A" train SI Pump and RHR Pump were considered inoperable, and therefore the "B" train RHR pump would have been required in the event of a Loss of Coolant Accident (LOCA). In order for the "B" RHR Pump to supply suction to either CCP, EMHV8923A is required to be open. For the eight minutes that EMHV8923A was closed, WCGS was not in compliance with Technical Specification 3.5.2. This condition required entry into Technical Specification 3.0.3, because no condition under Technical Specification 3.5.2 allows having both ECCS trains inoperable while in Mode 1 at 100% power. On February 11, 1999, WCGS personnel did not report entry into Technical Specification 3.0.3. NUREG-1022, Revision 1, Section 3.2.2(6) describes entry into Technical Specification 3.0.3 as reportable in accordance with 10 CFR 50.73(a)(2)(i)(B).

Event Description:

On December 14, 1999, Wolf Creek Generating Station (WCGS) personnel performing reviews prior to implementation of Technical Specification Amendment 123, identified that on February 11, 1999, while WCGS was in Mode 1 at 100% power, a combination component inoperabilities that could result in a violation of WCGS Technical Specification 3.5.2. Further reviews identified that on February 11, 1999, preventive maintenance procedure MPM LT-001 "Limitorque Operator Minor Maintenance, Lubrication, And Inspection" was being performed on Safety Injection Pump Suction Isolation Valve EMHV8923A. Concurrent with this valve outage, the Containment Spray Pump Room "A" Door 11121 was opened by Breach Authorization Permit 1999-060. This breach of a water-tight door rendered RHR Pump "A" inoperable due to potential flooding concerns.

The performance of procedure MPM LT-001 required that valve EMHV8923A be maintained closed for approximately eight minutes for minor maintenance. The WCGS Technical Specifications require that the RHR pumps be capable of taking a suction from the Containment Sumps and supplying suction to the required CCP and SI pump during the recirculation phase of ECCS operation. The design of the ECCS flow path is such that when valve EMHV8923A is closed, and the "A" train RHR Pump is inoperable, the "B" train RHR pump can not supply suction to either CCP during the recirculation phase of operation. In this instance, both the "A" train SI Pump and RHR Pump were inoperable; therefore, the "B" train RHR pump would have been required to supply the necessary ECCS flow in the event of a LOCA. In order for the "B" RHR Pump to supply suction to either CCP, valve EMHV8923A is required to be open. During the eight minutes that EMHV8923A was closed, on February 11, 1999, both trains were inoperable and WCGS was not in compliance with Technical Specification 3.5.2. This condition also required entry into Technical Specification 3.0.3 because no condition under Technical Specification 3.5.2 allows having both ECCS trains inoperable while in Mode 1 at 100% power.

Root Cause:

Performance Improvement Request (PIR) 1999-3942 was initiated to determine the root cause and corrective actions. The root cause of this event was inadequate identification of components capable of affecting operability of multiple ECCS trains and the absence of a programmatic mechanism to prevent activities incompatible with plant conditions from occurring on these components.

Corrective Actions Taken:

- The Control Room was notified of the discrepancy.
- As an interim corrective action, an operator aid was placed on the applicable Main Control Panel in the Control Room and in the Simulator. This operator aid identifies EMHV8923A as a valve that, if closed, could result in entry into Technical Specification 3.0.3. A tag containing similar information was placed on the valve in the plant.

Actions to Prevent Recurrence:

- Procedure AP 10-104 "Breach Authorization" will be revised to include instructions that will prevent the approval and issuance of a Breach Authorization Permit that allows breaching the Containment Spray Pump Room "A" Door (11121) concurrent with activities that could render EMHV8923A inoperable. This action will be completed by April 14, 2000.
- Procedure AP 22C-002 "Operational Risk Assessment Program" and form APF 22C-002-01 "Integrated Plant Scheduling Change Request" will be revised to assist in the identification and capture of incompatible work activities that may impact Technical Specification operability. This action will be completed by March 30, 2000.
- Surveillance Test Procedure STS EM-203 "Safety Injection System Inservice Valve Test" will be revised to include a "Precaution and Limitation" step that restricts performance

of EMHV8923A testing concurrent with the "A" RHR train inoperability. This action will be completed by May 30, 2000.

- Essential Reading will be issued for personnel with active SRO licenses, and Required Reading will be issued for Maintenance Planners, Operations Support, and Integrated Plant Scheduling (IPS) Work Week Managers. This action will be completed by February 15, 2000.

- In the WCGS Maintenance Planning and Control (MPAC) work control program, the "Asset Description" section for valve EMHV8923A will be changed in a manner to identify it as a valve with the potential to adversely affect required train redundancy. Additional information will be added to the asset "Notes" section. This action will be completed by February 24, 2000.

- A review and evaluation to identify other ECCS components that can have similar effects on Technical Specification operability will be completed by March 30, 2000.

Safety Significance:

Because there was no loss of safety function, there is minimal safety significance to the condition described in this License event Report. A small break LOCA initiates the Emergency Core Cooling System (ECCS) which draws a suction from the Refueling Water Storage Tank (RWST). After approximately sixty minutes, the RWST level is depleted to 36%, at which time an automatic transfer occurs to switch RHR pump suction from the RWST to the Containment Recirculation Sumps. At this time, sufficient water will have collected in the Containment Recirculation Sumps due to outflow of the Reactor Coolant System (RCS) break to provide sufficient net positive suction head (NPSH) to the RHR pumps. Because "B" train was the required train during the period when the event occurred, valve EMHV8923A would not have been required for safety purposes until the recirculation phase of ECCS operation.

Valve EMHV8923A would also be required for the hot leg recirculation phase of operation; however, this phase would not occur until ten hours after the LOCA occurred. Ample time existed in either case to restore valve EMHV8923A to the open position. Concurrent inoperability of both ECCS Trains occurred for only eight minutes.

In addition, the "A" RHR Pump was inoperable only due to the breached water-tight door. The pump remained functional. If an SI signal would have occurred during the period that EMHV8923A was closed, the pump would have started and performed its intended safety function. Even in the event that EMHV8923A could not have been opened, the "A" RHR Pump would have been capable of supplying suction to the CCPs during the recirculation phase of ECCS operation. Concurrently, the "B" RHR pump would have been capable of supplying suction to the "B" SI Pump. Therefore, this event did not result in a loss of safety function.

For the reasons given above, there is minimal safety significance to condition described in this License event Report.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Wolf Creek Generating Station	05000482	1999	015	00	5 OF 5

TEXT *(If more space is required, use additional copies of NRC Form 366A)* **(17)**

Other Previous Occurrences:

LERs were reviewed for the years 1997, 1998, and 1999. No reportable events with similar root cause and corrective actions were identified.

LIST OF COMMITMENTS

The following table identifies those actions committed to by Wolf Creek Nuclear Operating Corporation (WCNOC) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Michael J. Angus, Manager Licensing and Corrective Action at Wolf Creek Generating Station, (316) 364-4077.

COMMITMENT	Due Date/Event
As an interim corrective action, an operator aid was placed on the applicable Main Control Panel in the Control Room and in the Simulator. This operator aid identifies EMHV8923A as a valve that, if closed, could result in entry into Technical Specification 3.0.3. A tag containing similar information was placed on the valve in the plant.	Completed
Essential Reading will be issued for personnel with active SRO licenses, and Required Reading will be issued for Maintenance Planners, Operations Support, and Integrated Plant Scheduling (IPS) Work Week Managers.	February 15, 2000.
Surveillance Test Procedure STS EM-203 "Safety Injection System Inservice Valve Test" will be revised to include a "Precaution and Limitation" step that restricts performance of EMHV8923A testing concurrent with the "A" RHR train inoperability.	May 30, 2000.
Procedure AP 22C-002 "Operational Risk Assessment Program" and form APF 22C-002-01 "Integrated Plant Scheduling Change Request" will be revised to assist in the identification and capture of incompatible work activities that may impact Technical Specification operability.	March 30, 2000.
In the WCGS Maintenance Planning and Control (MPAC) work control program, the "Asset Description" section for valve EMHV8923A will be changed in a manner to identify it as a valve with the potential to adversely affect required train redundancy. Additional information will be added to the asset "Notes" section.	February 24, 2000.
A review and evaluation to identify other ECCS components that can have similar effects on Technical Specification operability will be completed by March 30, 2000.	March 30, 2000
Procedure AP 10-104 "Breach Authorization" will be revised to include instructions that will prevent the approval and issuance of a Breach Authorization Permit that allows breaching the Containment Spray Pump Room "A" Door (11121) concurrent with activities that could render EMHV8923A inoperable.	April 14, 2000.