

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Clay C. Warren
Chief Operating Officer

November 22, 1996

WO 96-0157

U. S. Nuclear Regulatory Commission
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Washington, D. C. 20555

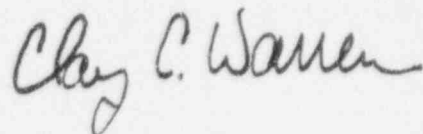
Subject: Docket No. 50-482: Licensee Event Report 96-016-00

Gentlemen:

The attached Licensee Event Report is being submitted pursuant to 10 CFR 50.73(a)(2)(i) concerning a failure to comply with the Technical Specifications.

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

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

9611270172 961122
PDR ADOCK 05000482
S PDR

LICENSEE EVENT REPORT (LER)

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

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

FACILITY NAME (1)

WOLF CREEK GENERATING STATION

DOCKET NUMBER (2)

05000482

PAGE (3)

1 OF 5

TITLE (4)

Failure To Comply With Technical Specification Requirement 3.4.9.1

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
10	23	96	96	016	00	11	22	96	FACILITY NAME	DOCKET NUMBER
OPERATING			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
1			20.402(b)			20.405(c)			50.73(a)(2)(iv)	73.71(b)
POWER			20.405(a)(1)(i)			50.36(c)(1)			50.73(a)(2)(v)	73.71(c)
100%			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)	
			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

Terry S. Morrill
Manager Regulatory Services

TELEPHONE NUMBER (Include Area Code)

316-364-8931 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

X

YES

(If yes, completed EXPECTED SUBMISSION DATE)

NO

YES

01

31

97

ABSTRACT:

On October 23, 1996, during the cause and extent evaluation performed as part of the corrective action process for Licensee Event Report (LER) 96-011-00, it was determined that Technical Specification Clarification (TSC) 016-86 was inappropriate to the circumstances. This TSC allowed testing to occur between the first and second isolation valves without correctly monitoring the temperature and pressure limits as described in the Technical Specification Surveillance 4.4.9.1.1.

Preliminary review has determined that WCNOB violated Surveillance Requirement 4.4.9.1.1 numerous times. Violations occurred during performance of STS PE-040B, Revision 3, "Reactor Coolant System Pressure Test". This event was reportable under 10CFR50.73(a)(2)(I)(B).

The root cause of this error is under investigation, and LER 96-016-00 will be supplemented by January 31, 1997. This supplement will contain additional detailed discussion of the root cause and corrective actions to prevent recurrence. Immediate corrective actions include deletion of TSC 016-86, the establishment of Essential Required Reading regarding the event, and the initiation of an investigation to determine root cause and extent.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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		96	016	00	

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

PLANT CONDITIONS AT THE TIME OF EVENT

MODE = 1
Reactor Coolant Pressure = 2234 psig
Reactor Power = 100%

BASIS FOR REPORTABILITY

10 CFR 50.73(a)(2)(i)(B) requires each licensee to report any operation or condition prohibited by the plant's Technical Specifications. Reportability is based on failing to perform Technical Specification Surveillance Requirement 4.4.9.1.1 numerous times between 1986 and the present. This surveillance requires that the Reactor Coolant System (RCS) temperature and pressure be determined within limits once each 30 minutes during heatup, cooldown, inservice leak rate testing, and hydrostatic testing of the Reactor Coolant System.

DESCRIPTION OF EVENT

On October 23, 1996, during the cause and extent evaluation performed as part of the corrective action process for Licensee Event Report (LER) 96-011-00, it was determined that Technical Specification Clarification (TSC) 016-86 was inappropriate to the circumstances. The TSC allowed the violation of WCGS Technical Specification 3.4.9.1, "Reactor Coolant System Pressure/Temperature Limits."

Technical Specification 3.4.9.1 requires the Reactor Coolant System (RCS) temperature and pressure (excluding the pressurizer) to be limited during heatup, cooldown, criticality, inservice leak testing and hydrostatic testing. 10 CFR 50.2, and Section 5.1.2 of the WCGS Updated Safety Analysis Report (USAR), define the RCS as including the piping to the second isolation valve (measured from the high pressure side). TSC 016-86, however, incorrectly re-defined the RCS, limiting the definition of the RCS to extend to the first isolation valve only. This incorrect interpretation of the Technical Specification then allowed testing to occur between the first and second isolation valves without the correct monitoring of the temperature and pressure limits, as described in the Technical Specification Surveillance 4.4.9.1.1.

Preliminary review has determined that WCNOC did violate Technical Specification Surveillance Requirement 4.4.9.1.1 numerous times. Leak rate testing has been performed by using procedures STS PE-019E, "RCS Isolation Check Valve Leak Test", STS PE-019B, "RHR Suction Valve Leak Test", and STS PE-040B, "Reactor Coolant System Pressure Test".

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

When performing the three procedures described above, an additional procedure, STS BB-011, "Reactor Coolant System and Pressurizer Heatup/Cooldown Surveillance" should be used by WCNO Operations to ensure compliance with WCNO Technical Specification Surveillance 4.4.9.1.1 during the RCS in-service leak tests. While reviewing the instances when Reactor Coolant System leak rate testing was performed, it was determined that WCNO procedure STS BB-011 was not performed in conjunction with these procedures on numerous occasions, from 1986 to the present. Failing to perform STS BB-011 resulted in a violation of Technical Specification Surveillance 4.4.9.1.1 on each of these occasions.

Revisions were made to STS PE-019B, STS PE-019E, and STS PE-040B on November 21, 1996, to ensure compliance to Technical Specification Surveillance 4.4.9.1.1.

Root Cause and Corrective Actions:

Root Cause and Contributing Factors:

As indicated above, the root cause of this event is currently under investigation. A supplement to LER 96-016-00 will be issued by January 31, 1997. This supplemental report will contain a detailed discussion of the root cause and contributing factors.

Corrective Actions

Immediate Corrective Actions:

- The On-duty Shift Supervisor was notified of the concern and the immediate actions taken.
- Procedures STS PE-019B, STS PE-019E, and STS PE-040B were revised on November 21, 1996, to ensure compliance to Technical Specification Surveillance 4.4.9.1.1.
- TSC 016-86 was deleted and removed from the Control Room on November 12, 1996.
- The deletion notice for TSC 016-86 was placed in the Operations Essential Reading Program. This action was taken to assure Licensed Personnel were made aware of the concerns related to this clarification prior to assuming their next watch.
- Operations staff initiated Performance Improvement Request 96-2706 to document the concern, the results of the root cause investigation, and the corrective actions implemented.

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- Operations staff initiated a Reportability Evaluation Request (RER 96-037) to assure all reportability aspects of this violation were evaluated.
- Operations, as part of LER 96-011-00 investigations, performed a detailed review of all developed TSCs to determine extent of the concern. This review identified a total of 12 clarifications which could have potentially caused a violation of the associated Technical Specification. The concern in this LER (LER 96-016-00) was identified as part of that review. These TSCs are undergoing additional review, and WCNOG will issue additional reviews to document each TSC which resulted in an actual violation of the associated Technical Specification.
- As a result of the investigation activities associated with LER 96-011-00, WCNOG established Incident Investigation Team (IIT) 96-004. This IIT was established on October 23, 1996, to evaluate the TSC Process. WCNOG will supplement this LER (LER 96-016-00 by January 31, 1997, after issuance of the IIT report. WCNOG will at that time provide a detailed discussion of the root cause, contributing factors, and corrective actions to prevent recurrence.

Long Term Corrective actions:

Corrective actions to prevent recurrence are under evaluation and will be established no later than January 31, 1997, after the issuance of IIT Report 96-004. Based on the findings of this IIT Report, a supplement to LER 96-016-00 will be issued. This LER supplement will provide, in part, the root cause and corrective actions to prevent recurrence.

Safety Significance:

The BASES for Technical Specification 3.4.9 denotes that the allowable pressure/temperature relationships for various heatup and cooldown rates are calculated using methods derived from Appendix G in Section III of the ASME Boiler and Pressure Vessel Code as required by Appendix G to 10 CFR Part 50.

10 CFR Part 50, Appendix G, "FRACTURE TOUGHNESS REQUIREMENTS" states the following:

"This appendix specifies fracture toughness requirements for ferretic materials of pressure-retaining components of the Reactor Coolant System Pressure Boundary of light water nuclear power reactors to provide adequate margins of safety during any condition of normal operation."

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While pressurizing the portion of the Reactor Coolant System between the first and second isolation valves, the primary area of heat addition would be between these valves. The area between these valves is made up of stainless steel and the requirements of 10 CFR 50 Appendix G specifically state that the limits are based on the fracture toughness for ferretic materials (reactor vessel). The pressure/temperature requirements of Technical Specification 3.4.9 were not placed in the Technical Specifications to address this portion of piping, therefore the absence of RCS temperature monitoring as required by the Technical Specification Surveillance does not constitute a safety concern.

The subject test procedures are performed at RCS temperature, and require a test pressure be maintained approximately fifty psig below the RCS pressure. This test pressure is continuously monitored throughout the test. A review was performed for each violation of the Surveillance Requirement 4.4.9.1.1 that was identified. This review confirmed that no pressure limits were exceeded, and no indication existed that the temperature limits were exceeded. Therefore the safety margin was not degraded.

Other Previous Occurrences:

WCNOC LERs 96-011-00, 96-012-00, 96-013-00, 96-014-00, 96-015-00, and 96-017-00 document similar events of incorrect Technical Specification Clarifications resulting in the potential violation of Technical Specifications. The event documented in this LER (96-016-00) was discovered 7 days after the event documented in LER 96-011-00. Therefore, root cause and corrective actions to prevent recurrence associated with LER 96-011-00 and subsequent LERs of a similar nature were still under evaluation, and could not have prevented the occurrence of this event.