



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
511 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

FEB 11 1997

EA 96-470

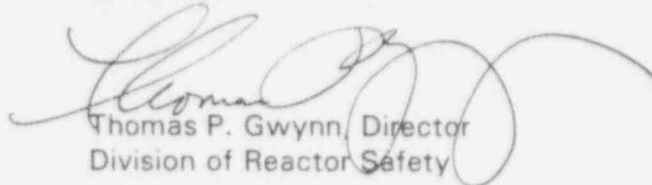
Neil S. Carns, President and
Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
P.O. Box 411
Burlington, Kansas 66839

SUBJECT: NRC INSPECTION REPORT 50-482/96-21 AND NOTICE OF VIOLATION

Dear Mr. Carns:

Thank you for your letter of January 31, 1997, in response to our letter and Notice of Violation dated December 31, 199~~7~~⁶. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,



Thomas P. Gwynn, Director
Division of Reactor Safety

Docket No.: 50-482
License No.: NPF-42

cc:
Vice President Plant Operations
Wolf Creek Nuclear Operating Corp.
P.O. Box 411
Burlington, Kansas 66839

Wolf Creek Nuclear
Operating Corporation

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Jay Silberg, Esq.
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW
Washington, D.C. 20037

Supervisor Licensing
Wolf Creek Nuclear Operating Corp.
P.O. Box 411
Burlington, Kansas 66839

Supervisor Regulatory Compliance
Wolf Creek Nuclear Operating Corp.
P.O. Box 411
Burlington, Kansas 66839

Chief Engineer
Utilities Division
Kansas Corporation Commission
1500 SW Arrowhead Rd.
Topeka, Kansas 66604-4027

Office of the Governor
State of Kansas
Topeka, Kansas 66612

Attorney General
Judicial Center
301 S.W. 10th
2nd Floor
Topeka, Kansas 66612-1597

County Clerk
Coffey County Courthouse
Burlington, Kansas 66839-1798

Public Health Physicist
Division of Environment
Kansas Department of Health
and Environment
Bureau of Air & Radiation
Forbes Field Building 283
Topeka, Kansas 66620

Wolf Creek Nuclear
Operating Corporation

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Mr. Frank Moussa
Division of Emergency Preparedness
2800 SW Topeka Blvd
Topeka, Kansas 66611-1287

Wolf Creek Nuclear
Operating Corporation

-3-

E-Mail report to T. Boyce (THB)
E-Mail report to NRR Event Tracking System (IPAS)

bcc to DMB (IE01)
bcc distrib. by RIV:

L. J. Callan	Resident Inspector
DRP Director	SRI (Callaway, RIV)
Branch Chief (DRP/B)	DRS-PSB
Project Engineer (DRP/B)	MIS System
Branch Chief (DRP/TSS)	RIV File
Leah Tremper (OC/LFDCB, MS: TWFN 9E10)	

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Wolf Creek Nuclear
Operating Corporation

-3-

E-Mail report to T. Boyce (THB)
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WOLF CREEK

NUCLEAR OPERATING CORPORATION

FEB - 3 1997

Clay C. Warren
Chief Operating Officer

January 31, 1997

WO 97-0018

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

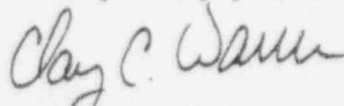
Reference: Letter dated December 17, 1996, from
T. P. Gwynn, NRC, to N. S. Carns, WCNOG
Subject: Docket No. 50-482: Response to Notice of
Violations 50-482/9621-01, -05, and -06

Gentlemen:

This letter transmits Wolf Creek Nuclear Operating Corporation's (WCNOG) response to Notice of Violations 50-482/9621-01, -05, and -06. The first violation concerns WCNOG's failure to maintain design control, in that, a configuration change package contained assumptions from out-of-date calculations. The second violation concerns WCNOG's failure to follow administrative procedures for performing operability determinations. The third violation concerns WCNOG's failure to have procedures which clearly required the test performer to tighten the mechanical position stops on specific Chemical Volume and Control System valves as required by Technical Specifications.

WCNOG's response to these violations is in the attachment. If you have any questions regarding this response, please contact me at (316) 364-8831, extension 4485, or Mr. Richard D. Flannigan at extension 4500.

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

97-0632

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Reply to Notice of Violations 50-482/9621-01, -05, and -06

Violation 50-482/9621-01: Design basis was not correctly documented
in a Configuration Change Package

- A. "10CFR50, Appendix B, Criterion III, requires, in part, that measures be established to assure that regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures, and instructions. These measures shall include provisions to assure that appropriate quality standards are specified and included in design documents.

Contrary to the above, on October 18, 1996, the design basis was not correctly translated into specifications for Configuration Change Package 07111, Revision 1, which was approved with an incorrect essential service water flow rate. Specifically, the basis for the suitability of the containment air coolers with reduced heat removal capacity used calculations with an assumed essential service water flow rate of 4000 gpm rather than the actual flow rate of 2000 gpm available to the coolers.

This is a Severity Level IV violation (Supplement 1) (50-482/9621-01)."

Admission of Violation:

Wolf Creek Nuclear Operating Corporation (WCNOC) acknowledges and agrees that a violation of Appendix B, Criterion III occurred when an out-of-date calculation was used in Configuration Change Package (CCP) 07111, Revision 1.

Reason for Violation:

The root cause is personnel error in that engineers failed to identify, understand, and document all of the relevant supporting design information.

An evaluation of the event has determined that the allowed reduced heat removal capability of the containment air coolers was technically justified and consistent with the design basis of the plant. However, CCP 07111 did not meet management expectations in that several out-of-date references were inappropriately used and the supporting design information was not properly researched and documented upon issuance of the CCP.

The reductions in containment cooler heat transfer area allowed by CCP 07111, Revision 0, Revision 1, & Revision 2 are all technically justified. The justification is documented in CCP CC00372 (issued March 27, 1993) and Plant Modification Request (PMR) 03339 (issued April 25, 1990) which were referenced as part of the basis for CCP 07111 Revision 0. PMR 03339 gave detailed guidance and justification regarding how much containment cooler heat transfer area could be reduced. The justification for PMR 03339 was performed when the Essential Service Water (ESW) flow rate to each containment cooler was 2000 gpm. Calculations SA-90-030 and GN-MW-005 were performed to support PMR 03339. CCP CC00372 stated that tube plugging guidance previously given in PMR

Reply to Notice of Violations 50-482/9621-01, -05, and -06

03339, as supplemented by PMR 03478, was still valid. PMR 03478 reduced the ESW flow rate to each containment cooler from 2000 gpm to 1000 gpm. It was supplemented to clarify that the tube plugging criteria given in PMR 03339 was still valid. The basis for this supplement to PMR 03478 was a comparison of the correct rated heat transfer capability of a containment cooler with an ESW flow rate of 2000 gpm to the much lower assumed heat transfer capability used in the revised accident analysis (calculations SA-90-057, SA-90-064, & SA-92-105). This basis, given in PMR 03478, is still valid today.

Contributing factors related to this event are:

- A technical review by the Nuclear Analysis group was not requested;
- Neither PMR 03339, SA-90-030 nor GN-MW-005 had been superseded, revised, or supplemented when the containment cooler ESW flow rate was reduced by PMR 03478;
- There is a lack of proficiency in using the supporting design information database;
- Individuals involved placed prompt completion over technical rigor
- The tube plugging criteria or margin was not clearly specified.

Corrective Steps Taken and Results Achieved:

Appropriate engineering personnel were counseled, during work product evaluations, on the use of design bases information that was not completely researched, understood and documented in CCP 07111. This corrective action is complete.

Performance Improvement Request PIR 96-2669 addressed concerns raised by the Plant Safety Review Committee on the difference in the information provided in CCP 07111 Revision 1 and Revision 2. This PIR addressed the questions of heat input for ESW warming lines, containment pressure limits and containment cooler heat removal capacity. The PIR addressed the difference in the margins between the capacity of the coolers with 1000 gpm ESW flow rate per containment air cooler versus 2000 gpm ESW flow rate per containment air cooler. The review was completed prior to exiting the LCO. This corrective action is complete.

CCP 07111 has been revised to:

- Clarify tube plugging margin information for the SGN01 A, B, C, & D coolers (Management recognizes that the issue related to the tube plugging margin is more generic and an effort is underway by Nuclear Engineering to establish ownership and management of safety margins);
- Supersede calculation SA-90-030, void calculation GN-MW-005 and consolidate information into one calculation, GN-M-006;
- Revise the System Description, Design Specification and Vendor Manual documents to reflect current information;
- Update the design information database for supplemental calculation SA-90-25; and
- Revise the USAR.

Reply to Notice of Violations 50-482/9621-01, -05, and -06

This corrective action is complete.

Corrective Steps That Will Be Taken And The Date When Full Compliance Will Be Achieved:

Work product evaluations will be revised to reinforce the expectation of proper use and review of the design information database and appropriate cross disciplinary technical review. The revisions will be completed by February 28, 1997.

Training will be provided to applicable engineering personnel on the use of design information databases for the search and retrieval of supporting information. The training will be completed by July 7, 1997.

Management recognizes that the available engineering design databases and information system need enhancement to facilitate search, retrieval and maintenance of the supporting design information data. A study is presently underway and improvement recommendations will be considered for implementation beginning in 1998. The study will be completed by September 30, 1997.

Management recognizes that the individuals involved allowed the need for promptness to compromise technical rigor. Management does not consider this acceptable and will communicate their expectations to supervision and employees by February 28, 1997.

Reply to Notice of Violations 50-482/9621-01, -05, and -06

Violation 50-482/9621-05: An operability determination was not thoroughly documented in the Shift Supervisor's log as required by administrative procedures.

- B. "Criterion V of Appendix B to 10 CFR Part 50 requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedure, and drawings appropriate to the circumstances, and shall be accomplished in accordance with these instructions, procedures, or drawings.

Procedure ADM 02-024, "Technical Specification Operability," requires operability determinations to include a determination of the requirement or commitment established for the equipment.

Contrary to the above, on October 22, 1996, at 2:10 p.m., the shift supervisor reviewed a statement that listed conflicting Updated Safety Analysis Report, Technical Specification and Calculation GN-MW-005 information, which pertained to containment air cooler essential service water flow rates, and performed an operability determination without including the requirement established for the equipment. Specifically, the shift supervisor relied on an out-of-date calculation, GN-MW-005, which assumed a cooler group (i.e., two coolers) flow rate of 4000 gpm, instead of determining the actual requirement for containment air cooler group essential service water flow rate of 2000 gpm.

This is a Severity Level IV violation (Supplement 1) (50-482/96-21-05).

Admission of Violation:

Wolf Creek Nuclear Operating Corporation (WCNOC) acknowledges and agrees that a violation of Criterion V of Appendix B to 10 CFR Part 50 occurred when the Shift Supervisor made an operability determination without following administrative guidance.

Reason for Violation:

Evaluation and root cause analysis of the event determined that the Shift Supervisor was correct in his determination that no operability/reportability concerns existed. However, the root cause is personnel error in that the Shift Supervisor did not meet the expectations of the Manager Operations or the procedural requirements of ADM 02-024, (since superseded by AP 26C-004) "Technical Specification Operability," in that the basis for the operability determination was not documented in the Shift Supervisor's log.

Corrective Steps Taken and Results Achieved:

Performance Improvement Request (PIR) 96-2737 which documented this event, was placed into Operations personnel required reading to remind Shift Supervisors of management's expectation for detailed log entries.

Reply to Notice of Violations 50-482/9621-01, -05, and -06

As referenced in the inspection report, during the past year there were three similar examples of poorly supported operability determinations. The Operations Manager expects that log entries will be detailed and able to support any conclusions reached. To correct this problem, administrative procedure, AP 26C-004, "Technical Specification Operability," was revised to clearly reflect that a detailed log entry will be made by the Shift Supervisor whenever the Shift Supervisor records a decision concerning operability. This detailed log entry will include the basis for the operability decision. Additionally, an operability screening checklist was added to AP 26C-004, to ensure thoroughness of evaluation and consistency in documentation.

Reply to Notice of Violations 50-482/9621-01, -05, and -06

Violation 50-482/9621-06: Procedure STS BG-004 did not specifically require operators to tighten or verify the mechanical position stops for valves BGV-198, BGV-199, BGV-200, and BGV-201

- C. "Technical Specification 6.8.1.a states, in part, that written procedure shall be established, implemented, and maintained, covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2.

Regulatory Guide 1.33, Appendix A, , Section 3.n, requires procedures for startup, operation, and shutdown, of the chemical and volume control system.

Procedure STS BG-004, "CVCS Seal Injection and Return Flow Balance," Revision 4, provides procedural guidance for setting the position of seal injection throttle valves BGV-198, BGV-199, BGV-200, and BGV-201, and performing Technical Specification Surveillance Requirement 4.5.2.g. (verifying the correct position of the mechanical position stops) for these valves.

Contrary to the above, on October 23, 1996, Procedure STS BG-004 did not specifically require operators to tighten or verify the mechanical position stops for valves BGV-198, BGV-199, BGV-200, and BGV-201.

This is a Severity Level IV violation (Supplement 1) (50-482/96-021-06)."

Admission of Violation:

Wolf Creek Nuclear Operating Corporation (WCNOC) acknowledges and agrees that a violation of Technical Specification 6.8.1.a occurred as procedure STS BG-004, "CVCS Seal Injection and Return Flow Balance," did not provide adequate instructions on how to tighten, nor to verify tightened, the Chemical Volume and Control System (CVCS) mechanical position stops.

Reason for Violation:

The root cause is inadequate procedural guidance. Procedure STS BG-004, "CVCS Seal Injection and Return Flow Balance," failed to provide adequate instructions. This procedure did not require the performers to tighten, nor verify tightened, the lock-nuts (mechanical position stops) on CVCS valves BG-V198, BG-V199, BG-V200, BG-V201, and BG-V202.

A contributing factor was that procedure AP 21G-001, "Control Of Locked Component Status," failed to define "mechanical stop" and what constitutes a mechanical stop at WCNOC.

Reply to Notice of Violations 50-482/9621-01, -05, and -06

Corrective Steps Taken and Results Achieved:

A review of the applicable procedures was performed to identify areas for improvement. The results from that review included revision of procedure AP 21G-001 to incorporate a clear definition of "mechanical stop" and what constitutes a mechanical stop at WCNOG. Additionally, procedure STS BG-004 was revised to incorporate instructions to assure the mechanical position stops are tightened and/or verified tightened.

Date When Full Compliance was Achieved:

The above listed corrective actions were completed by January 30, 1997.