



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV

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ARLINGTON, TEXAS 76011-8064

DEC 24 1996

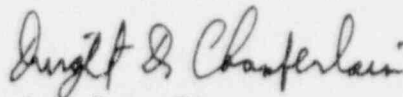
Neil S. Carns, President and  
Chief Executive Officer  
Wolf Creek Nuclear Operating Corporation  
P.O. Box 411  
Burlington, Kansas 66839

SUBJECT: NRC INSPECTION REPORT 50-482/96-18

Dear Mr. Carns:

Thank you for your letter of December 6, 1996, in response to our letter and Notice of Violation dated November 7, 1996. 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,

  
for J. E. Dyer, Director  
Division of Reactor Projects

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

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

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-2-

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DEC 24 1996

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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bcc to DMB (IE01)

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# WOLF CREEK

NUCLEAR OPERATING CORPORATION

DEC 10

Neil S. "Buzz" Carns  
Chairman, President and  
Chief Executive Officer

December 6, 1996

WM 96-0137

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
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Washington, D. C. 20555

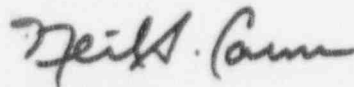
Reference: Letter dated September 23, 1996, from  
J. E. Dyer, NRC, to N. S. Carns, WCNOC  
Subject: Docket No. 50-482: Response to Notice of  
Violations 50-482/9618-02, -03, -04, and -07

Gentlemen:

This letter transmits Wolf Creek Nuclear Operating Corporation's (WCNOC) response to Notice of Violations 50-482/9618-02, -03, -04, and -07. Violation 9618-02 concerns the failure to correctly remove power from a safety injection pump discharge valve. Violation 9618-03 concerns the failure to maintain containment integrity during core alterations. Violation 9618-04 concerns the incorrect performance of a portion of the surveillance requirements specified by Technical Specification 4.8.1.1.2.g(6)(c), while at power. Violation 9618-07 concerns the failure to perform required post modification testing.

WCNOC's responses to these violations are in the attachment. If you have any questions regarding this response, please contact me at (316) 364-8831, extension 4100, or Mr. Terry S. Morrill at extension 8707.

Very truly yours,



Neil S. Carns

NSC/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

97-0364

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Reply to Notice of Violations 50-482/9618 -02, -03, -04, and -07

Violation 50-482/9618-02: The failure to correctly remove power from a safety injection pump discharge valve.

"A. Technical Specification 3.5.4 requires that all safety injection pumps be inoperable during Modes 5 and 6 with the reactor vessel head on. The pumps are to be made inoperable by securing the motor circuit breaker in the open position. The inoperable pump may be energized for testing or for filling accumulators provided the discharge at the pump has been isolated from the reactor coolant system by a closed isolation valve with power removed from the valve operator or by a manual isolation valve secured in the closed position.

Contrary to the above, on March 23, 1996, with the plant was in Mode 5, operators discovered that Safety Injection Pump Discharge Valves EM HV-8802A and -8821A handswitches were tagged "Do Not Operate" closed, but still had power available to them. The pump motor circuit breaker was racked closed so that Safety Injection Pump A could be started."

Admission of Violation:

Wolf Creek Nuclear Operating Corporation (WCNOC) acknowledges and agrees that a violation of Technical Specification 3.5.4 occurred in March 1996, when operators failed to remove power from Safety Injection Pump Discharge Valves EM HV-8802A and -8821A. This event was self discovered and reported to the NRC in Licensee Event Report (LER) 96-004-00 (WCNOC Letter Number WM 96-0054, issued on April 19, 1996).

Reason for Violation:

Root Cause and Contributing Factors:

See LER 96-004-00.

Corrective Steps Taken and Results Achieved:

In addition to the corrective actions documented in LER 96-004-00, the following actions have been implemented:

1. The test director involved with the clearance order was counseled.
2. The shift supervisor that authorized the change to the clearance order was counseled.
3. The individuals responsible for implementing the corrective actions were counseled.

The corrective actions as documented in LER 96-004-00 and the additional corrective actions documented above, are considered adequate for compliance with the requirements of the technical specifications. The paragraphs below describe additional measures being undertaken to enhance the root cause/corrective action process.

Corrective Steps That Will Be Taken And Their Expected Completion Dates:

Discussions, to review the root cause determination process, will be held with Operations department supervision. These discussions will focus on lessons learned and procedural requirements associated with the root cause determination and appropriate corrective actions. This action will be completed by December 31, 1996.

Performance Improvement Request (PIR) 96-2592 was issued to address the mismatches between the root causes and corrective actions documented in LERs 96-004-00 and 96-005-00. This PIR will be placed in Operations required reading to familiarize the staff with the errors made and the lessons learned.

The corrective action program is being modified to include the following:

1. The formation of a formal corrective action review board. This board chair will be assigned by the Chief Operating Officer. This board will review root cause determination and corrective action plan for all significant PIRs. This action was implemented on November 30, 1996.
2. Organizational changes will be implemented such that each group within the Plant Operations Organization will have personnel whose primary responsibility will be to support the corrective action process. This action will be completed by January 31, 1997.
3. Additional training will be conducted for all managers (one day) and individuals responsible for implementing the corrective action program (three days). This action will be completed by January 31, 1997.

Safety Significance:

During the time frame that the Technical Specification for cold over-pressure protection was not being met, administrative controls remained in place to protect the vessel from over-pressurization. The discharge valves EM HV-8802A and EM HV-8821A were tagged closed, and no additional volume could have been added to the vessel. Even if the SI pumps were inadvertently started, the closed discharge valves would have prevented volume addition to the vessel. Therefore, the safety significance of this event is low.



Violation 50-482/9618-03: The failure to maintain containment integrity during core alterations.

"B. Technical Specification 3.9.4 requires that each penetration providing direct access from the containment atmosphere to the outside atmosphere be closed by an isolation valve, blind flange, manual valve, or be capable of being closed by an operable automatic containment isolation valve. This Technical Specification is applicable during core alterations or movement of irradiated fuel within containment.

Contrary to the above, on March 14, 1996, the licensee found that operators had directed the opening of Containment Isolation Valve BM-V046 to allow draining of Steam Generator B and C. Core alterations were in progress at the time the valves were open."

Admission of Violation:

WCNOC acknowledges and agrees that a violation of Technical Specification 3.9.4 occurred in March 1996, when operators had incorrectly directed the opening of a containment isolation valve (resulting in a loss of containment integrity) during core alterations. This event was discovered and reported to the NRC in LER 96-005-00 (WCNOC Letter Number WO 96-0096, issued on June 19, 1996).

Reason for Violation:

Root Cause and Contributing Factors:

In addition to the root cause and contributing factor, as documented in LER 96-005-00, the following contributing factor has been identified:

System Operating Procedure SYS BM-201, "Steam Generator Draining," failed to clearly establish initial conditions necessary to allow the draining of the steam generators. Because this contributing factor was not identified the responsible personnel failed to perform a review to determine if other similar procedures failed to establish adequate initial conditions prior to performance of required actions.

Corrective Steps Taken and Results Achieved:

In addition to the corrective actions documented in LER 96-005-00, the following corrective actions have been implemented:

A review was conducted of similar procedures and two additional procedures needed revision. They are:

1. SYS EF-420, "Draining ESW Trains"
2. SYS EG-401, "Component Cooling Water System Drain Procedure"

The procedures will be revised by December 31, 1996.

The errors associated with the initial root cause evaluation were discussed during a group meeting with the Operations Support Staff.



Safety Significance:

The water drained from Steam Generators B and C was non-radioactive, secondary system water. Valve BM-V046 was open for one hour and twenty-four minutes. During that time, the flow of water varied and, toward the end of the event, flow reduced to a trickle. Due to the piping configuration and atmospheric conditions in both buildings, loop seals formed during the draining process and no direct air to air access occurred. Additionally, no fuel handling accident occurred during this time, and no increase of radioactivity was noted by the containment radiation monitors. The health and safety of the public and plant safety were assured during this event.

Violation 50-482/9618-04: The incorrect performance of a portion of the surveillance requirements specified by Technical Specification 4.8.1.1.2.g(6)(c), while at power.

"C. Technical Specification 4.8.1.1.2.g.(6).(c) requires testing during shutdown to verify that all automatic diesel generator trips except those that remain during emergency operation be automatically bypassed upon loss of voltage on the emergency bus concurrent with a safety injection actuation signal, once per 18 months.

Contrary to the above, on July 23, 1996, while the plant was at approximately 100 percent power, technicians performed Work Packages 114086 and 114087, which accomplished a portion of the surveillance required by Technical Specification 4.8.1.1.2.g.(6)(c)."

Admission of Violation:

WCNOC acknowledges and agrees that a violation of Technical Specification 3.8.1.1 occurred on July 23, 1996, when technicians performed Work Packages 114086 and 114087, in an attempt to meet the testing requirements of Technical Specification 4.8.1.1.2.g(6)(c). This event was self discovered and reported to the NRC in LER 96-007-00.

Reason for Violation:

Root Causes:

The root causes of this event were determined to be:

1. Inadequate pre-job briefing: During the pre-test review and discussion between the shift supervisor and system engineering, the technical specification requirement that this testing be performed "during shutdown" was not considered. The decision, that the work package testing was equivalent to Surveillance Procedure STS KJ-001A, "Integrated D/G and Safeguards Actuation Test-Train A," which can only be performed when shutdown, was incorrect.
2. The failure to establish adequate administrative controls: AP 29B-003, "Surveillance Testing," allows credit for meeting surveillance requirements by alternate means. Section 6.2.3 of this procedure provides guidance for situations where "tests/events" may be approved as satisfying technical specifications. These guidelines require the designation of a "Test Performer" who is responsible for reviewing the test/event for credit. This review, as described in the procedure, only requires the Test Performer to compare the test/event to the plant procedure incorporating the same requirements. In this case, the work package test was compared to only a single section, Attachment M - Step M11, of STS KJ-001, and found to meet the requirements for that step of the procedure. This comparison was used as the basis for taking credit for meeting the technical specification surveillance requirement. The procedure did not require review of the applicable technical specification requirements.

3. An inappropriate organizational culture: Following recognition that the technical specifications required the testing to be performed "during shutdown," WCNOC personnel justified the acceptability of this testing based on compliance with the perceived intent of the technical specifications. The basis clearly acknowledged that the testing did not achieve verbatim compliance with technical specifications.

Corrective Actions Taken And Results Achieved:

1. On November 6, 1996, the Chief Operating Officer issued Letter WO 96-0146, "Compliance With Requirements." This letter clearly communicated, to all personnel, the requirement regarding literal compliance with Title 10 of the Code Of Federal Regulations, technical specifications and the Updated Safety Analysis Report.

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

1. The process of taking credit for meeting surveillance requirements by alternate means, as detailed in AP 29B-003 will be evaluated and revised to limit the use of "credit sheets." The use of work package tasks, or other documents not subject to the review and approval requirements for Surveillance procedures, will be prohibited. A detailed review of applicable Technical Specification requirements will be required as part of the "credit" process.
2. Applicable operations procedures will be reviewed and revised as necessary to require that any testing to satisfy surveillance requirements on inservice equipment be performed in accordance with an approved procedure. (Similar to controls currently in place for maintenance on inservice equipment - reference AP 16-001, "Control of Maintenance," section 6.6.2-4, and AP 16C-003, "Work Package Task Planning," section 6.2.3.1).
3. LER 96-007 will be revised to address that the testing performed on July 23, 1996, which was a corrective action for the failure to perform this surveillance during refueling outage VIII, did not fulfill the requirement to perform the test "during shutdown," but did demonstrate operability of the emergency diesel generator volts/hertz relays.

The above discussed actions will be completed by January 31, 1997.

Safety Significance:

The failure to perform the post modification operability testing did not result in any adverse consequences to the plant. No systems were rendered inoperable, and no equipment was damaged. The relays were individually tested upon completion of the modification installation process to assure their functionality. The post-modification testing performed on July 23, 1996, demonstrated the relays were correctly installed and were operable. Based on the results of the testing WCNOC is confident that if a condition had occurred between the time of installation and the time of testing, the relays would have been bypassed and the EDGs would have started and functioned as required.

Violation 50-482/9618-07: The failure to perform required post modification testing.

"D. Technical Specification 4.8.1.1.2.g.(6).(c) requires testing during shutdown to verify that all automatic diesel generator trips except those that remain during emergency operation be automatically bypassed upon loss of voltage on the emergency bus concurrent with a safety injection actuation signal, once per 18 months.

Contrary to the above, on July 23, 1996, the licensee found that the required testing had not been performed for the volts per hertz relays which had been installed in the two emergency diesel generator control circuits during Refueling Outage VIII in February 1996."

Admission of Violation:

WCNOC acknowledges and agrees that a violation of Technical Specification 4.8.1.1.2.g.(g).(c) occurred during Refueling Outage VIII, when WCNOC failed to perform the require post modification testing on the volts/hertz relays prior to returning to power. This event was self discovered and reported to the NRC in LER 96-007-00 (WCNOC Letter Number WO 96-0118, issued on August 22, 1996).

Reason for Violation (Root Cause) and Corrective Steps Taken and Results Achieved:

LER 96-007-00 describes the root cause and corrective steps taken and results achieved.

Safety Significance:

The failure to perform the post modification operability testing did not result in any adverse consequences to the plant. No systems were rendered inoperable, and no equipment was damaged. The relays were individually tested upon completion of the modification installation process to assure their functionality. The post-modification testing performed on July 23, 1996, demonstrated the relays were correctly installed and were operable. Based on the results of the testing WCNOC is confident that if a condition had occurred between the time of installation and the time of testing, the relays would have been bypassed and the EDGs would have started and functioned as required.