

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

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

February 23, 1995

WM 95-0022

J. Lieberman, Director Office of Enforcement  
U. S. Nuclear Regulatory Commission,  
One White Flint North  
11555 Rockville Pike,  
Rockville MD 20852-2738

Reference: Letter dated January 25, 1995, from  
L. J. Callan, NRC/RIV, to N. S. Carns, WCNOG  
(Inspection Report 50-482/94-18)  
Subject: Docket No. 50-482: Reply to Notice of  
Violations 482/9418-01 (EA 94-251),  
482/9418-02, and 482/9418-03

Gentlemen:

Attached is Wolf Creek Nuclear Operating Corporation's (WCNOG's) reply to Notices of Violation 482/9418-01 (EA 94-251), 482/9418-02, and 482/9418-03 that were documented in the Reference (NRC Inspection Report 50-482/94-18).

Violation 482/9418-01 (EA 94-251) concerned the rapid drain-down of the pressurizer and partial depressurization of the reactor coolant system.

Violation 482/9418-02 concerned the inappropriate omission of a procedural step resulting in a violation of a procedure precaution statement.

Violation 482/9418-03 concerned WCNOG's failure to determine if an emergency declaration such as a Notification Of Unusual Event should have been declared.

WCNOG's response to these Notices of Violation is in the Attachment to this letter. If you should have any questions regarding this response, please contact me at (316) 364-8831, extension 4000, or Mr. Richard D. Flannigan at extension 4500.

A civil penalty of \$25,000.00 was assessed in this incident. Enclosed is a check in the amount of \$25,000 made payable to the Treasurer of the United States.

Very truly yours,

*Neil S. Carns*  
Neil S. Carns

NSC/jad

000022

Attachment

cc: L. J. Callan (NRC), w/a  
D. D. Chamberlain (NRC), w/a  
J. F. Ringwald (NRC), w/a  
J. C. Stone (NRC), w/a  
Document Control Desk, w/a

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STATE OF KANSAS       )  
                              )  SS  
COUNTY OF COFFEY     )

Neil S. Carns, of lawful age, being first duly sworn upon oath says that he is President and Chief Executive Officer of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the content thereof; that he has executed that same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.



By Neil S. Carns  
Neil S. Carns  
President and  
Chief Executive Officer

SUBSCRIBED and sworn to before me this 23 day of February, 1995.

Linda M. Ohmie  
Notary Public

Expiration Date 8-31-1998

Reply to Notices of Violation 9418-01, 02, and 03

Violation 482/9418-01 (EA 94-251): Rapid drain-down of the pressurizer and partial depressurization of the reactor coolant system.

- "I. Technical Specification 6.8.1.a states that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, dated February 1978.

Regulatory Guide 1.33, Appendix A, Item 3.c, recommends administrative procedures to address startup, operation, and shutdown of a shutdown cooling system.

Procedure SYS EJ-120, "Startup of a Residual Heat Removal Train," Revision 22, step 6.3.3.3, requires operators to close the RHR Train A Hot Leg Recirc Valve, EJ HV8716A. The procedure requires this step to be performed prior to proceeding to Step 6.3.11 and Section 6.10, "Recirculating RHR Train B with CTMT Spray Train B Running," which requires operators to open RHR Pump Return to RWST, Valve BN-V8717.

Contrary to the above, on September 17, 1994, operators were starting up Residual Heat Removal Train B, utilizing Procedure SYS EJ-120, and had opened Valve BN V8717 in accordance with Section 6.10, when Valve EJ HV8716A was opened under Work Request 05811-93, causing a rapid drain-down of the pressurizer and a partial depressurization of the reactor coolant system. (01013)"

Admission of Violation:

Wolf Creek Nuclear Operating Corporation (WCNOC) acknowledges and agrees that a violation of Technical Specification 6.8.1.a occurred, on September 17, 1994, when Valve EJ HV8716A was opened, causing a rapid drain-down of the pressurizer and partial depressurization of the reactor coolant system.

Reason for Violation:

Root Cause:

The root cause of this event was that WCNOC Licensed Operators inappropriately allowed two incompatible evolutions to occur simultaneously. At the time of the event the "B" Residual Heat Removal (RHR) train was being lined up for Refueling Water Storage Tank (RWST) recirculation concurrent with the stroking of EJ HV-8716A.

Contributing Factors:

1. The stroking of EJ HV-8716A was not compatible with the boundary conditions for Reactor Coolant System (RCS) cooldown using the "A" RHR train.

2. Minor check valve leakage led to the reduction of the "B" RHR train boron concentration, thus requiring recirculation to increase the boron concentration prior to placing this train in service for normal cooldown during an outage.

Corrective Steps Taken and Results Achieved:

WCNOC established Incident Investigation Team (IIT) 94-04 to perform a root cause evaluation and recommend corrective actions.

Subsequent to the event, WCNOC issued Institute of Nuclear Power Operations (INPO) Operational Event (OE) Message 6947 and voluntary LER 94-013-00 to alert the industry of the event. Additionally, WCNOC discussed this event at the December, 1994, Westinghouse Owners Group Operations Sub-Committee meetings.

At the Management Meeting on the morning of the event, the Manager Operations thoroughly discussed the perceived cause, immediate actions taken, and all planned corrective actions.

The Manager Operations briefed all operating crews on this event. Management's expectations were clearly delineated at the briefings.

A placard has been placed on BN 8717 to require the Nuclear Station Operator to check with the Control Room to verify that EJ HV-8716A and EJ HV-8716B are in the appropriate position before opening BN 8717.

A uniquely keyed lock has been placed on BN 8717, and Administrative Procedure ADM 02-102, "Control Of Locked Component Status," states that the approval of either the Vice President Operations or the Manager Operations is required prior to opening BN 8717.

An engineering evaluation determined that recirculation of the RHR trains prior to placing them in service is not required provided:

1. The boron concentration in the applicable train exceeds the boron concentration required for shutdown margin, or
2. The boron concentration is no more than 100 ppm below the concentration required for shutdown margin, and at least two reactor coolant pumps (RCPs) are running.
3. The boron concentration is greater than or equal to the required shutdown margin boron concentration and no Technical Specification Action Statement limiting positive reactivity addition is in effect.

An alternate means to increase the boron concentration is to align the RHR system to the Recycle Hold-Up Tank (RHUT) via the low pressure letdown system. The use of BN 8717 will not be required for this activity.

The above criteria have been incorporated into System Operating Procedures SYS EJ-120, "Startup Of A Residual Heat Removal Train," and SYS EJ-121, "RHR Train Startup In Cooldown Mode," to preclude future occurrence of this event.



A site-wide "stand down" day to emphasize the importance of procedural adherence was held on January 13, 1995.

An electronic mail message was sent to all Operations personnel on December 12, 1994, summarizing the information presented at the December 16, 1994, Enforcement Conference.

Training was provided to the licensed operators (both in requalification and initial training) and non-licensed operators. This training included the potential consequences of this type of event, classroom discussions, a Mode 4 LOCA on the simulator, and the importance of consulting all applicable procedures after an event. This training will be completed by March 1, 1995.

Corrective Steps That Will Be Taken to Avoid Further Violations:

Procedure OFN BB-031, "Shutdown LOCA," is being revised by specifying the RCP trip criteria to coincide with a small break LOCA event mitigation strategy. Further evaluation of the mitigation strategy is ongoing and will be completed in March, 1995. During the transition from power operations to shutdown conditions, heightened sensitivity and controls will be incorporated to ensure that no undue distractions will have a deleterious effect on putting the plant in a stable configuration. Subsequent procedure enhancement will be made as appropriate. WCNOC will submit any potential generic issues identified by this evaluation to the Westinghouse Owners Group for consideration.

WCNOC IIT Report 94-04 will be revised as appropriate based on further review of this event. Final IIT recommendations will be evaluated and implemented as appropriate.

Date When Full Compliance Will Be Achieved:

Full compliance with Technical Specification 6.8.1.a has been achieved. WCNOC's evaluation of its mitigation strategy, and the subsequent IIT Report changes will be completed in March, 1995.

Violation 482/9418-02: Inappropriate omission of a procedural step, resulting in a violation of a procedural precaution statement.

"II. Technical Specification 6.8.1.a states that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, dated February 1978.

Regulatory Guide 1.33, Appendix A, Item 3.c, recommends administrative procedures to address procedure adherence and temporary change method and recommends administrative procedures to address abnormal, off-normal, or alarm conditions.

1. Procedure AP 15C-002, "Procedure Use and Adherence," Revision 0, step 6.7.5.2, allows omission of a step or section if the omission does not violate the precautions and limitations stated in the procedure.

Contrary to the above, on September 16, 1994, Step 5.3 of Procedure STS EJ-202, which requires the plant to be in Mode 5 or Mode 6 during the performance of RHR valve testing, was omitted and marked "not applicable," and RHR valve testing was performed in Mode 4, thus violating a precaution stated in the procedure. (02014)"

#### Admission of Violation:

WCNOC acknowledges and agrees that a violation of Technical Specification 6.8.1.a occurred on September 16, 1994, when Step 5.3 of Procedure STS EJ-202, "RHR System Inservice Valve Test," was omitted and marked NA."

#### Reason for Violation:

The root cause of this event was determined to be personnel error, in that the Supervising Operator inappropriately marked Step 5.3 of Procedure STS EJ-202 NA. Marking Step 5.3 NA is contrary to the guidance given in Procedure AP 15C-002, "Procedure Use and Adherence."

#### Corrective Steps Taken and Results Achieved:

Training was provided to the operators covering the inappropriate use of NA. This training was completed for all operating crews by October 2, 1994.

A site-wide "stand down" day to emphasize the importance of adherence to procedures was held on January 13, 1995.

An electronic mail message was sent to all Operations personnel on December 22, 1994, summarizing the information presented at the December 16, 1994, Enforcement Conference.

Procedure STS EJ-202 was revised to clarify mode requirements. The revised procedure was issued on November 21, 1994.

Corrective Steps That Will Be Taken to Avoid Further Violations:

The corrective actions described above are considered appropriate and sufficient to prevent further occurrences of this violation.

Date When Full Compliance Will Be Achieved:

Full compliance with Technical Specification 6.8.1.a has been achieved.

Violation 482/9418-03: Failure to determine if an emergency declaration such as an Notification Of Unusual Event should have been declared.

"II. Technical Specification 6.8.1.a states that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, dated February 1978.

Regulatory Guide 1.33, Appendix A, Item 3.c, recommends administrative procedures to address procedure adherence and temporary change method and recommends administrative procedures to address abnormal, off-normal, or alarm conditions.

2. Procedure OFN BB-031, "Shutdown LOCA [Loss of Coolant Accident]," Revision 1, foldout page paragraph 4, requires operators to "Determine emergency action levels using EPP 01-2.1, EMERGENCY CLASSIFICATION, while continuing with this procedure."

Contrary to the above, on September 17, 1994, an event involving loss of coolant inventory occurred and operators did not determine emergency action levels using EPP 01-2.1. Specifically, operators did not evaluate plant conditions to determine if an emergency declaration such as an NOUE should have been declared. (02024)"

Admission of Violation:

WCNOC acknowledges and agrees that a violation of Technical Specification 6.8.1.a occurred on September 17, 1994, when the operators did not utilize EPP 01-2.1, "Emergency Classification," to determine if an emergency declaration, such as a Notification of Unusual Event (NOUE), should have been declared.

Reason for Violation:

On September 17, 1994, an inadvertent drain down of the reactor coolant system occurred. While the operating crews took immediate actions to terminate the event the crew should have entered OFN BB-031 to ensure that their actions were appropriate. Entering OFN BB-031 would have keyed them to evaluate the Emergency Action Levels (EAL), and to determine if an emergency classification should have been declared. In this case no emergency classification was warranted. Though no emergency classification was warranted, the root cause of this oversight was cognitive personnel error, in that the Operating Crews failed to enter OFN BB-031 upon termination of the event.

Corrective Steps Taken and Results Achieved:

When the Outage Control Center was notified of the original event, the Outage Shift Manager mentally reviewed the event for any appropriate emergency classification. When the Vice President Plant Operations was informed of the event, the Outage Shift Manager indicated that he did not believe an EAL classification was warranted. When the Manager Operations arrived on site approximately one hour after the event, he reviewed each EAL tree and corroborated that an EAL classification was not warranted.



The event was not classified for the following reasons:

- It was terminated very quickly.
- No radioactive release occurred.
- Water volumes transferred were contained in plant systems.
- RCS remained subcooled.
- Nuclear Energy Institute Methodology supports a non-classification.
- The health and safety of the public was not effected.

The Manager Operations briefed all operating crews on this event. During the briefings, management expectations on procedure adherence and the use of OFNs and EALs were clearly delineated.

A site-wide "stand down" day to emphasize the importance of procedural adherence was held on January 13, 1995.

An electronic mail message was sent to all Operations personnel on December 12, 1994, summarizing the information presented at the December 16, 1994, Enforcement Conference.

Training was provided to the operators during Requalification Cycle 95-01, covering the potential consequences of this type of event, and the importance of consulting all procedures including off-normal and emergency plan implementing procedures. This training is scheduled to be completed by February 24, 1995.

Corrective Steps That Will Be Taken to Avoid Further Violations:

The corrective actions as described above are considered appropriate and sufficient to prevent further occurrences of this violation.

Date When Full Compliance Will Be Achieved:

Full compliance with Technical Specification 6.8.1.a has been achieved and all corrective actions have been completed.