APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-482/87-06 LP: NPF-42

Docket: 50-482

Licensee: Wolf Creek Nuclear Operating Corporation (WCNOC)
P. O. Box 411
Burlington, Kansas 66839

Facility Name: Wolf Creek Generating Station (WCGS)

Inspection At: Wolf Creek Site, Coffey County, Burlington, Kansas

Inspection Conducted: March 1-31, 1987

Inspectors: L E Cummins 4/14/87
J. E. Cummins, Senior Resident Inspector, Operations — Date

Bruce L Bartlett 4/14/87
B. L. Bartlect, Resident Reactor Inspector, Operations — Date

J R Boardman 4/15/87
J. R. Boardman, Reactor Inspector, Operation Section, Reactor Safety Branch — Date

Approved: D R Hunter 4/15/87
D. R. Hunter, Chief, Reactor Project Section B, Reactor Projects Branch — Date

Inspection Summary

Inspection Conducted March 1-31, 1987 (Report 50-482/87-06)

Areas Inspected: Routine, unannounced inspection including plant status, operational safety verification, monthly surveillance observation, monthly maintenance observation, onsite event followup, corrective action, and licensee event reports.

Results: Within the seven areas inspected, one violation was identified (fire door blocked open, paragraph 4). One unresolved item is identified in paragraph 4.

DETAILS

1. Persons Contacted

Principal Licensee Personnel

*G. D. Boyer, Plant Manager
O. L. Maynard, Manager of Licensing
*C. M. Estes, Superintendent of Operations
M. D. Rich, Superintendent of Maintenance
*M. G. Williams, Superintendent of Regulatory, Quality, and Administrative Services
W. J. Rudolph, QA Manager-WCGS
*A. A. Freitag, Manager, Nuclear Plant Engineering-WCGS
M. Nichols, Plant Support Superintendent
*K. Peterson, Licensing
*G. Pendergrass, Licensing
*W. M. Lindsay, Supervisor Quality Systems
C. J. Hoch, QA Technologist

The NRC inspectors also contacted other members of the licensee's staff during the inspection period to discuss identified issues.

*Denotes those personnel in attendance at the exit meeting held on April 1, 1987.

2. Plant Status

The plant operated in Mode 1 during this inspection period.

3. Followup of Previously NRC Identified Items

(Closed) Violation (482/8608-03): Failure to Adequately Perform TS Surveillance Requirement.

This violation identified a situation where the stroke distance on two valves was adjusted improperly to meet the stroke time requirements. The NRC inspector reviewed the following documents to verify that the valve stroke distance was corrected and that no other valves had been modified in the same manner: WCGS Internal Operations Program Deficiency 86-02, Plant Modification Request 01669, Work Request (WR) 01694-86, and Engineering Evaluation Request 86-AL-01. This violation is closed.

(Closed) Open Item (482/8605-02): Essential Service Water Inside Auxiliary Feedwater System.

This open item was being used to track the licensee's actions following the inadvertent introduction of essential service water into portions of the auxiliary feedwater system (AFW). The licensee flushed the AFW system and during the first refueling outage all steam generators were sludge lanced. This open item is closed.

(Closed) Violation (482/8613-02): Data Not Recorded On a Work Request (WR) As Required.

This violation concerned a completed WR which did not have all the data recorded that was required. The NRC inspector verified that the violation had been placed in the electrical and mechanical maintenance required reading program. Mechanical maintenance had completed the required reading, while electrical maintenance was nearly finished with the required reading. This violation is closed.

4. Operational Safety Verification

The NRC inspectors verified that the facility is being operated safely and in conformance with regulatory requirements by direct observation of licensee facilities, tours of the facility, interviews and discussions with licensee personnel, independent verification of safety system status and limiting conditions for operations, and reviewing facility records. The NRC inspectors, by observation of randomly selected activities and interview of personnel verified that physical security, radiation protection, and fire protection activities were controlled.

By observing accessible components for correct valve position and electrical breaker position, and by observing control room indication, the NRC inspectors confirmed the operability of the safety injection system. The NRC inspectors also visually inspected safety components for leakage, physical damage, and other impairments that could prevent them from performing their designed functions.

Selected NRC inspector observations are discussed below:

On March 25, 1987, during a routine tour of the control room, the NRC inspector reviewed three Wolf Creek Work Request (WR) that had been written on containment isolation valves. The WRs were on Valves BG HV-8105, GT HZ-6 and LF FV-96 and were written to inspect and repair, as necessary, valve internals during the next refueling outage. Retest instructions were written to perform local leak rate tests (LLRT). Upon questioning Results Engineering personnel, the NRC inspector determined that the valves had exhibited some leakage during the last LLRT, but that the leakage was within acceptance criteria and that the maintenance was to be performed as a precaution.

The licensee stated that an 'as-found' LLRT would not be performed prior to maintenance. The 10 CFR Part 50, Appendix J, section III.c. requirements state, in part, "Each valve to be tested shall be closed by normal operation and without any preliminary exercising or adjustments . . . ." The NRC inspector informed the licensee that in his opinion Section III.c required that the valves be tested in the 'as-found' condition and that a LLRT should be performed prior to valve internal maintenance. Pending further review, this item will remain unresolved (482/8706-02).

On March 4, 1987, during a routine tour of the 2016 ft. elevation of the control building, the NRC inspector observed that TS Fire Door 34031 had an air hose running through it, blocking it open and thereby preventing it from performing its design function. After checking the surrounding area and not finding any workers, the NRC inspector called the control room supervisor operator (SO). The SO stated that no fire impairment permit had been issued for Door 34031. As the NRC inspector was leaving the area, a worker was seen adjusting the air hose. Upon questioning, the worker stated he had blocked the door open with his air hose in order to reach the only air connection on that floor and that he had not initiated an impairment permit. This failure to get a fire impairment permit as required by plant procedures is an apparent violation (482/8706-01).

5. Monthly Surveillance Observation

The NRC inspectors observed selected portions of the performance of surveillance testing and/or reviewed completed surveillance test procedures to verify that surveillance activities were performed in accordance with TS requirements and administrative procedures. The NRC inspectors considered the following elements while inspecting surveillance activities:

- Testing was being accomplished by qualified personnel in accordance with an approved procedure
- The surveillance procedure conformed to TS requirements
- Required test instrumentation was calibrated
- Technical Specification limiting conditions for operation (LCO) were satisfied
- Test data was accurate and complete. Where appropriate, the NRC inspectors performed independent calculations of selected test data to verify their accuracy
- The performance of the surveillance procedure conformed to applicable administrative procedures

- The surveillance was performed within the required frequency and the test results met the required limits.

Surveillances witnessed and/or reviewed by the NRC inspectors are listed below:

- STS BG-001, Revision 3, "Boron Injection Flow Path Verification," performed on December 27, 1986
- STS BG-003, Revision 3, "Boration System Flow Rate Verification," performed on October 17, 1986

No violations or deviations were identified.

6. Monthly Maintenance Observation

The NRC inspector observed maintenance activities performed on safety-related systems and components to verify that these activities were conducted in accordance with approved procedures, Technical Specifications, and applicable industry codes and standards. The following elements were considered by the NRC inspector during the observation and/or review of the maintenance activities:

- LCOs were met and, where applicable, redundant components were operable
- Activities complied with adequate administrative controls
- Where required, adequate, approved, and up-to-date procedures were used
- Craftsmen were qualified to accomplish the designated task and technical expertise (i.e., engineering, health physics, operations) was made available when appropriate
- Replacement parts and materials being used were properly certified
- Required radiological controls were implemented
- Fire prevention controls were implemented where appropriate
- Required alignments and surveillances to verify post maintenance operability were performed
- Quality control hold points and/or checklists were used when appropriate and quality control personnel observed designated work activities

Selected portions of the maintenance activities accomplished on the work requests listed below were observed and related documentation reviewed by the NRC inspector:

- o WR 52341-86, "Annual Maintenance Of Para Blade Isolation Dampers"
- o WR 00727-87, "Para Blade Isolation Damper GGD-019"

No violations or deviations were identified.

7. Onsite Event Followup

The NRC inspector performed onsite followup of a nonemergency event that occurred during this report period. The NRC inspector reviewed control room logs and discussed the event with cognizant personnel. The NRC inspector verified the licensee had responded to the event in accordance with procedures and had notified the NRC and other agencies as required in a timely fashion. An engineered safety feature actuation that occurred during the report period is listed in the table below. The NRC inspector will review the LER for this event and will report any findings in a subsequent NRC inspection report.

Date	Event	Plant Status	Cause
3/09/87	CRVIS*	Mode 1	Spurious spike

*Control Room Ventilation Isolation System

No violations or deviations were identified.

8. Corrective Action

The NRC inspector discussed with licensee personnel the corrective action aspects of licensee management systems and procedures.

No violations or deviations were identified.

9. Review of Licensee Event Report (LER)

During this inspection period, the NRC inspectors performed followup on Wolf Creek LERs. The LERs were reviewed to ensure:

- o Corrective action stated in the report has been properly completed or work is in progress.
- o Response to the event was adequate.
- o Response to the event met license conditions, commitments, or other applicable regulatory requirements.
- o The information contained in the report satisfied applicable reporting requirements.
- o Generic issues were identified.

The LERs discussed below were reviewed and closed:

LER 482/86-057: Unplanned Engineered Safety Features Actuation During Surveillance Testing.

This LER reported an event where an unplanned Train A and B fuel building ventilation isolation signal (FBVIS) and Train A control room ventilation isolation signal (CRVIS) were initiated because of the presence of a trip signal from Radiation Monitor GG RE-27. The trip signal was generated by the simultaneous performance of two surveillance tests and a personnel error in removing GG RE-27 from the bypass condition. The LER was made required reading for operating personnel.

LER 482/86-053: Delay In Establishing Required Fire Watch For Fire Protection Impairment.

This LER reported an event where the shift supervisor (SS) issued an impairment control permit to establish an hourly fire watch patrol of an auxiliary feedwater alternate supply valve to compensate for the removal of the fire barrier enclosure around the valve, but failed to notify the fire watch patrol to add the area to their watch. The LER was made required reading for operating personnel.

LER 482/86-050: TS Violation Caused By Incomplete Closure Of Fire Door.

This LER reported an event where an NRC inspector on a routine plant tour discovered a fire door had been blocked open and unattended. It was later determined that contractor personnel had been holding the door open for ventilation while cleaning up a charcoal spill, but on leaving the area for shift turnover had left the door open. Discussions were held with the involved personnel and their foreman emphasized the importance of TS fire barriers. In addition, TS fire doors have been posted.

10. Unresolved Item

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in paragraph 4.

11. Exit Meeting

The NRC inspectors met with licensee personnel to discuss the scope and findings of this inspection on April 1, 1987. The NRC inspectors also attended entrance/exit meetings of the NRC region-based inspectors identified below:

Inspection Period	Lead Inspector	Area Inspected	Inspection Report No.
03/02-06/87	B. Nicholas	Transportation and Solid Radwaste Activities	87-08
03/02-06/87	J. Kelly	Security	87-07
03/16-17/87	J. Boardman	Corrective Action Program	87-06