

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

NRC Inspection Report: 50-482/91-07      Operating License: NPF-42

Docket: STN 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: WCGS, Coffey County, Burlington, Kansas

Inspection Conducted: March 11-15, 1991

Inspectors: *H. F. Bundy*      3/21/91  
H. F. Bundy, Reactor Inspector      Date  
Test Programs Section, Division of Reactor  
Safety

*D. A. Powers*      3/21/91  
D. A. Powers, Senior Reactor Inspector      Date  
Test Programs Section, Division of Reactor  
Safety

Approved: *W. C. Seidle*      3/21/91  
W. C. Seidle, Chief      Date  
Test Programs Section, Division of Reactor  
Safety

Inspection Summary

Inspection Conducted March 11-15, 1991 (Report 50-482/91-07)

Areas Inspected: Routine, announced inspection of licensee actions or previous inspection findings and the licensee's surveillance testing and calibration control programs.

Results: The administrative procedures covering the surveillance testing and calibration control programs were functional and effectively implemented. They provided for appropriate evaluation of test results. Surveillance testing and calibration schedules reviewed appeared to reflect performance requirements effectively. The Technical Specification to procedure number matrix was found to contain inaccuracies. Plant management committed to performing an audit to determine the extent of these inaccuracies (Open Item 482/9107-01, paragraph 3). Other potential weaknesses discussed in paragraph 3 involved the following:

- ° Inconsistency in marking the "Complete" or "Partial" blocks on the surveillance test routing sheet,
- ° A large number of procedures listed on the past-due surveillance report, which were not actually past due, and
- ° Lack of a formal or comprehensive surveillance activities trending program.

Violation 482/8817-03 was closed.

No violations or deviations were identified.

DETAILS

1. PERSONS CONTACTED

WCNOC

- \*B. D. Withers, President
- \*F. T. Rhodes, Vice President, Engineering and Technical Support
- \*G. O. Boyer, Director, Plant Operations
- \*C. C. Parry, Director, Quality
- \*J. Pippin, Director, Nuclear Plant Engineering (NPE)
- \*R. W. Holloway, Manager, Maintenance and Modifications
- \*M. E. Dingler, Manager, NPE-System
- \*C. W. Fowler, Manager, Instrumentation and Control (I&C)
- \*W. B. Norton, Manager, Technical Support
- \*M. G. Williams, Manager, Plant Support
- \*J. Weeks, Manager, Operations
- D. Gerrelts, Supervisor, I&C
- S. Robinson, Supervisor, I&C
- A. Clason, Supervisor, Maintenance Engineering
- \*T. Damashek, Supervisor, Quality Surveillance
- \*L. Stevens, Supervising Engineer, NPE
- \*S. G. Wideman, Senior Engineering Specialist
- \*R. Schmidt, Surveillance Coordinator
- R. Wollum, Engineering Specialist, I&C
- S. Nelson, Maintenance Engineer, Maintenance Support
- H. K. Chernoff, Supervisor, Licensing

KEPCo

- \*B. Goshorn, Planning Engineer

NRC

- \*L. L. Gundrum, Resident Inspector

The inspectors also interviewed other licensee employees during the inspection.

\*Denotes those attending the exit meeting on March 15, 1991.

2. LICENSEE ACTIONS ON PREVIOUS INSPECTION FINDINGS (92702)

(CLOSED) Violation (482/8817-03): Failure to Take Adequate and Timely Corrective Actions for Problems Identified with the Containment Hydrogen Analyzers

This violation involved the licensee's failure to take action sufficient to correct a condition in which the containment hydrogen analyzers were continually found out-of-tolerance during quarterly surveillance tests in a 2-year period ending in April 1988. The inspectors were informed that the

hydrogen analyzers had been rebuilt to eliminate the drift problems. Review by the inspectors of current trending data for hydrogen analyzer surveillance tests confirmed that the hydrogen analyzers are now reliable, and this specific issue is considered closed.

In Letter ET 88-0097 to the NPC, dated July 11, 1988, the licensee committed, in part, to trend surveillance activities as a part of the corrective steps, which were to be taken to avoid further violations. The inspectors reviewed trending being performed by the instrumentation and control (I&C) department and determined that a considerable amount of useful trend data was being generated. Several instrument problems had been identified by this data and corrected. Furthermore, I&C management and engineering personnel stated that they were gainfully using trending data.

In discussions with the plant management, the inspectors learned that the response in the July 11, 1988, letter was meant to apply to only selected I&C activities. Based on this narrow interpretation of surveillance activities, this violation is considered closed. The licensee's plans for developing a comprehensive program for trending of surveillance activities are discussed in paragraph 3.

### 3. SURVEILLANCE TESTING PROGRAM (61725)

The purpose of this part of the inspection was to ascertain whether the licensee had developed a program for control and evaluation of surveillance testing, calibration, and inspection required by Section 4 of WCGS Technical Specifications. The inspectors found that a surveillance testing program had been developed and effectively implemented. It provided for appropriate evaluation of surveillance test results; however, a comprehensive program for trending of as-found data was not evident. Specific comments follow.

The Attachment is a tabulation of related documents reviewed by the inspectors. When a document number is cited below, it will be the number assigned in the Attachment.

The administrative procedures (Documents 1-6) for Technical Specification-related surveillance testing were functional. A surveillance group, led by the surveillance coordinator, published the following schedules for Technical Specification-related surveillances:

- ° R1 - regular frequency periods of greater than or equal to 1 month
- ° R2 - frequency period of less than 1 month, and not covered by routine logs

The surveillance group initiated performance of the R2 tests. The cognizant departments developed schedules to initiate performance of the R1 tests (e.g., Documents 10 and 11).

Test completion was documented on a surveillance test routing sheet (STRS) which reflected appropriate reviews and approvals. Each test deficiency was evaluated to determine if it constituted a Technical Specification failure. Appropriate entries were required in the equipment out-of-service log and action statement summary log in accordance with Documents 7 and 8, respectively. During interviews with representatives from various departments, the inspectors determined that there was inconsistency in checking the "Completion" blocks on the STRS in the event a test deficiency existed. The Operations department typically would not check these blocks if an outstanding test deficiency existed. Operations, on the other hand, would check these blocks if appropriate corrective action documentation had been initiated for a test deficiency. Maintenance might use either convention, depending on the circumstances. Management was urged at the exit meeting to review these practices to determine if a consistent approach should be used. No safety issues were identified by the inspectors.

The inspectors reviewed a Technical Specification change (Document 12) to determine if appropriate revisions had been made to the surveillance tests, and determined that they had. The inspectors also compared these and a few other examples to the Technical Specification to procedure number matrix (Document 9) and identified the following deficiencies:

- ° The frequencies were incorrect for Technical Specification 4.5.5.a.2 and Procedure 4.10.4.2.
- ° Procedure STS-IC-250C was responsive to a Technical Specification requirement, but was not included in the matrix.

Also, a licensee representative stated that he had recently been late in deleting two procedures from the matrix because of incorrect answers to Question 6 on the procedure change form safety evaluation screening section. These errors had not caused Technical Specification surveillance testing deficiencies. However, because the above errors were discovered by the inspectors during review of only a few examples, the accuracy of the Technical Specification to procedure number matrix is questionable. Licensee management committed at the exit meeting to completing an audit of this document. Review of the results of this audit will be tracked as Open Item 482/9107-01.

The inspectors reviewed a past due surveillance report (Document 17) with 113 procedures listed, of which 63 became past due prior to 1991. In discussing this report with a licensee representative, the inspectors learned that the older entries were not actual past due problems. Rather they reflected the system's inability to define partial completion requirements. To make this report easier to use and reliable, the licensee was urged to improve its resolution to identify only actual delinquencies.

In conjunction with the followup on the violation discussed in paragraph 2, the inspectors discussed trending of as-found data for surveillance activities with the licensee and learned that no comprehensive program existed. This finding is consistent with findings reported in NRC Inspection Reports 50-482/88-27 (maintenance team inspection) and 50-482/90-37 (maintenance team followup inspection).

The licensee had recognized the value of trending such data from the work being performed by the I&C department as discussed in paragraph 2 above. The plant manager stated at the exit meeting that the licensee would discuss its plans for the development of a comprehensive program for trending of surveillance activities in a letter to the NRC.

No violations or deviations were identified.

#### 4. CALIBRATION CONTROL PROGRAM (61725)

The purpose of this part of the inspection was to ascertain whether the licensee had developed a program for control and evaluation of the calibration of safety-related instrumentation not specifically controlled by Technical Specifications.

The I&C department compiled a list of in-plant process instrumentation, which was used to determine acceptance criteria to Technical Specification-related surveillance procedures. This list was controlled in accordance with Document 1. Calibration of these instruments was performed by the I&C department in accordance with the same administrative requirements established for Technical Specification-related surveillance testing (Document 2). Established periodicities were listed in the schedules (Documents 10 and 14). Among other factors, frequency of performance was based on commitments, engineering judgement, and calibration history. The inspectors noted maintenance performed a few non Technical Specification-related surveillances in the fire protection area (Document 15). Also, I&C performed non Technical Specification-related surveillance testing on safety-related instruments, which were not used to determine acceptance criteria of Technical Specification-related surveillance procedures in accordance with schedules (Document 10 and 14) established by Document 2.

Calibrations were performed by I&C on non safety-related components pursuant to requirements established in Document 13. The schedules for these calibrations were established by the I&C department and reflected in the master schedule (Document 10). The test procedures and test results were approved within the I&C department. Safety-related components were also calibrated in accordance with procedures prepared pursuant to Document 13. However, it appeared that final acceptance of the related equipment was in accordance with surveillance test procedures.

It appeared that the maintenance department performed inspections, calibrations, and lineups on certain safety-related components in accordance with a schedule established in Document 16 as a part of its preventive maintenance program. This inspector finding was based solely on a cursory review of Document 16.

No violations or deviations were identified.

#### 5. EXIT MEETING

The inspectors met with licensee representatives denoted in paragraph 1 on March 15, 1991, and summarized the scope and findings of this inspection. Further discussions regarding inspection findings were discussed with Mr. Bart Withers, by telephone on March 28, 1991. The licensee did not identify as proprietary any information provided to, or reviewed by, the inspectors.

ATTACHMENT

DOCUMENTS REVIEWED

1. Procedure ADM 02-300, "Surveillance Testing," Revision 16
2. Procedure ADM 08-807, "I&C Group Surveillance Testing," Revision 8
3. Procedure ADM 02-311, "Surveillance Test Master Cross-Reference and Review Requirements," Revision 5
4. Procedure ADM 02-312, "Mode Change Checklists and Surveillance Tracking Program"
5. Procedure ADM 02-008, "Surveillance Coordinator Qualifications and Responsibilities," Revision 4
6. Procedure ADM 01-200, "TS Change Review," Revision 2
7. Procedure ADM 02-105, "Equipment Out of Service Log (E.O.L.)," Revision 6
8. Procedure ADM 02-010, "Shift Relief and Turnover," Revision 14
9. TS Inquiry, dated March 8, 1991
10. Mapper WC-IC34B, "Master Test and Recalibration Schedule for I&C Equipment," dated March 7, 1991
11. Mapper C005164, "I&C Special Schedule for TS Surveillances"
12. Letter - NRC to WCNOC, "WCGS - Amendment No. 35 to Facility Operating License No. NPF-42," dated February 1, 1990
13. Procedure ADM 08-806, "I&C Group Calibration of Process Instrumentation and Special Maintenance," Revision 9
14. Mapper C005164, "I&C Special Schedule for Non-TS Surveillances"
15. Mapper B001542, "Maintenance Non-TS Surveillance Schedule"
16. Mapper B004122, "Maintenance Preventive Maintenance Schedule"
17. WCNOC Past Due Surveillance Report, dated March 12, 1991