

WOLF CREEK NUCLEAR OPERATING CORPORATION

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Vice President Engineering
and Information Services

DEC 7 2000

ET 00-0044

U. S. Nuclear Regulatory Commission
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Washington, D. C. 20555

Subject: Docket No. 50-482: Application for Technical Specification Improvement to Eliminate Requirements for Post Accident Sampling System Using the Consolidated Line Item Improvement Process

Gentlemen:

In accordance with the provisions of 10 CFR 50.90, Wolf Creek Nuclear Operating Corporation (WCNOC) is submitting a request for an amendment to WCNOC's license NPF-42 to change the technical specifications for the Wolf Creek Generating Station (WCGS).

The proposed amendment would delete Technical Specification (TS) 5.5.3, "Post Accident Sampling System," and thereby eliminate the requirements to have and maintain the Post Accident Sampling System (PASS) at WCGS. The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)." The availability of this technical specification improvement was announced in the Federal Register on October 31, 2000 as part of the consolidated line item improvement process (CLIIP). As discussed in the notice of availability for this TS improvement, this request also revises TS 5.5.2, "Primary Coolant Sources Outside Containment," to reflect the elimination of PASS.

The WCNOC Plant Safety Review Committee and the Nuclear Safety Review Committee have reviewed this amendment application. Attachment I provides a description of the proposed change, the requested confirmation of applicability, and plant specific verifications. Attachment II provides the existing TS pages marked-up to show the proposed change. Attachment III provides the existing TS Bases pages marked-up to show the proposed change (for information only). Attachment IV provides revised clean technical specification pages. Attachment V provides a summary of the licensing commitments made in this submittal.

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WCNOC requests approval of the proposed License Amendment by February 28, 2001, with the amendment being implemented by December 1, 2001. The approval date was administratively selected to allow for NRC review, but the plant does not require this amendment to allow continued safe full power operation.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Kansas State Official. If you should have any questions regarding this submittal, please contact me at (316) 364-4034, or Mr. Tony Harris at (316) 364-4038.

Very truly yours,



Richard A. Muench

RAM/rlr

Attachments: I - Description and Assessment
 II - Proposed Technical Specification Changes
 III - Proposed Technical Specification Bases Changes
 IV - Revised Technical Specification Pages
 V - List of Commitments

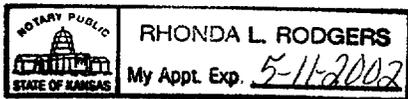
cc: V. L. Cooper (KDHE), w/a
 J. N. Donohew (NRC), w/a
 W. D. Johnson (NRC), w/a
 E. W. Merschoff (NRC), w/a
 Senior Resident Inspector (NRC), w/a

STATE OF KANSAS)
) SS
COUNTY OF COFFEY)

Richard A. Muench, of lawful age, being first duly sworn upon oath says that he is Vice President Engineering and Information Services 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 *Richard A. Muench*
Richard A. Muench
Vice President Engineering and
Information Services

SUBSCRIBED and sworn to before me this 7th day of Dec., 2000.



Rhonda L. Rodgers
Notary Public

Expiration Date *May 11, 2002*

ATTACHMENT I
Description and Assessment

Discussion and Assessment

1.0 INTRODUCTION

This proposed License Amendment Request (LAR) is a request pursuant to 10 CFR 50.90 to revise Technical Specification (TS) 5.5.2, "Primary Coolant Sources Outside Containment," and delete TS 5.5.3, "Post Accident Sampling System."

2.0 DESCRIPTION

The proposed License amendment would revise TS 5.5.2, "Primary Coolant Sources Outside Containment," to delete the Post Accident Sampling System (PASS) from the Primary Coolant Sources Outside Containment Program. The proposed License amendment also deletes the program requirements of TS 5.5.3, "Post Accident Sampling System."

The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-366 (Reference 1). The availability of this technical specification improvement was announced in Federal Register, Vol. 65, No. 211 (Reference 2), on October 31, 2000, as part of the consolidated line item improvement process (CLIP).

3.0 BACKGROUND

Westinghouse Owners Group (WOG) topical report WCAP-14986-A, Rev. 2, "Post Accident Sampling System Requirements: A Technical Basis," (Reference 3) evaluated the PASS requirements to determine their contribution to plant safety and accident recovery. The topical report considered the progression and consequences of core damage accidents and assessed the accident progression with respect to plant abnormal and emergency operating procedures, severe accident management guidance, and emergency plans. WCAP-14986-A, Rev. 2, concluded that the current PASS samples specified in NUREG-0737, "Clarification of TMI Action Plan Requirements," may be eliminated.

4.0 TECHNICAL ANALYSIS

4.1 Applicability of Published Safety Evaluation

Wolf Creek Nuclear Operating Corporation (WCNOC) has reviewed the safety evaluation published as part of the CLIP. This verification included a review of the NRC staff's evaluation as well as the supporting information provided to support TSTF-366 (i.e., WCAP-14986-A, Rev.2, "Post Accident Sampling System Requirements: A Technical Basis," submitted October 26, 1998, as supplemented by letters dated April 28, 1999, April 10, 2000, and May 22, 2000). WCNOC has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to the Wolf Creek Generating Station (WCGS) and justify this amendment for the incorporation of the changes to the WCGS Technical Specifications.

4.2 Optional Changes and Variations

WCNOC is not proposing any variations or deviations from the technical specification changes described in TSTF-366 or the NRC staff's model safety evaluation published on October 31, 2000.

The WCGS TS include an administrative requirement for a program to minimize the leakage from those portions of systems outside containment that contain highly radioactive fluids during a serious transient or accident. PASS is specifically listed in TS 5.5.2 as falling under the scope of this requirement. As described in the staff's model safety evaluation published on October 31, 2000, WCNOC is proposing to implement a modification such that PASS would not be a potential leakage path outside containment. This modification will not, however, be made during the implementation period for this amendment. As such, TS 5.5.2 is revised to add the phrase "(until such time as a modification eliminates the PASS penetration as a potential leakage path)". The above phrase makes clear that TS 5.5.2 remains applicable to the PASS as long as it is a possible leakage path and reflects that the actual modification of the piping system may be scheduled beyond the implementation period for this amendment.

The elimination of PASS results in changes to the discussion in the Bases section for TS 3.4.15, "RCS Leakage Detection Instrumentation." The current Bases mention the capabilities of PASS for performing a gamma isotopic analysis of the containment atmosphere. Proposed changes to the Bases for TS 3.4.15 is provided in Attachment III. Attachment III is provided for information and changes to the TS Bases are processed in accordance with TS 5.5.14, "Technical Specification (TS) Bases Control Program."

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Determination

WCNOC has reviewed the proposed no significant hazards consideration determination published as part of the CLIP. WCNOC has concluded that the proposed determination presented in the notice is applicable to WCGS and the determination is hereby incorporated, by reference to satisfy the requirements of 10 CFR 50.91(a).

5.2 Verification and Commitments

As discussed in the notice of availability published in Federal Register (Reference 2) for this technical specification improvement, plant-specific verifications were performed as follows:

1. WCNOC has developed contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. A description of the contingency plans will be contained in the radiological emergency response plan or emergency plan implementing procedures and implemented with the implementation of the License amendment. Establishment of contingency plans is considered a regulatory commitment.
2. The capability for classifying fuel damage events at the Alert level threshold has been established at 2 - 5% fuel clad damage. This level of core damage is associated to radioactivity levels of 300 $\mu\text{Ci/cc}$ dose equivalent iodine. This capability will be described in emergency plan implementing procedures and implemented with the

implementation of the License amendment. The capability for classifying fuel damage events is considered a regulatory commitment.

3. WCNOG has established the capability to monitor radioactive iodines that have been released to offsite environs. This capability is described in our emergency plan implementing procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.

6.0 ENVIRONMENTAL EVALUATION

WCNOG has reviewed the environmental evaluation included in the model safety evaluation published on October 31, 2000 as part of the CLIP. WCNOG has determined that the staff's findings presented in that evaluation are applicable to WCGS and the evaluation is hereby incorporated by reference for this application.

7.0 REFERENCES

1. Industry/TSTF Standard Technical Specification Change Traveler TSTF-366, "Elimination of Requirements for a Post Accident Sampling System (PASS)."
2. Federal Register, Vol. 65, No. 211, "Notice of Availability for Referencing in License Amendment Applications Model Safety Evaluation on Technical Specification Improvement to Eliminate Requirements on Post Accident Sampling Systems Using the Consolidated Line Item Improvement Process," dated October 31, 2000.
3. Westinghouse Owners Group (WOG) topical report WCAP-14986-A, Rev. 2, "Post Accident Sampling System Requirements: A Technical Basis," July 2000.

ATTACHMENT II
PROPOSED TECHNICAL SPECIFICATION CHANGES

5.5 Programs and Manuals (continued)

5.5.2 Primary Coolant Sources Outside Containment

(until such time as a modification eliminates the PASS penetration as a potential leakage path)

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include appropriate portions of Containment Spray, Safety Injection, Chemical and Volume Control, Residual Heat Removal, and Nuclear Sampling System (Post Accident Sampling System only). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3 Post Accident Sampling

Not Used.

~~This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:~~

- ~~a. Training of personnel;~~
- ~~b. Procedures for sampling and analysis; and~~
- ~~c. Provisions for maintenance of sampling and analysis equipment.~~

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

(continued)

ATTACHMENT III
PROPOSED TECHNICAL SPECIFICATION BASES CHANGES

BASES

ACTIONS

A.1 and A.2

A primary system leak would result in reactor coolant flowing into the containment normal sumps or into the instrument tunnel sump. Indication of increasing sump level is transmitted to the control room by means of individual sump level transmitters. This information is used to provide measurement of low leakage by monitoring level increase versus time.

With the required Containment Sump Level and Flow Monitoring System inoperable, no other form of sampling can provide the equivalent information; however, the containment atmosphere particulate radioactivity monitor will provide indications of changes in leakage. Together with the atmosphere monitor, the periodic surveillance for RCS water inventory balance, SR 3.4.13.1, must be performed at an increased frequency of 24 hours to provide information that is adequate to detect leakage. A Note is added allowing that SR 3.4.13.1 is not required to be performed until 12 hours after establishing steady state operation (near operating rated operating pressure with stable RCS pressure, temperature, power level, pressurizer and makeup tank level, makeup and letdown, and RCP seal injection and return flows). The 12 hour allowance provides sufficient time to collect and process all necessary data after stable plant conditions are established.

Restoration of the required Containment Sump Level and Flow Monitoring System to OPERABLE status within a Completion Time of 30 days is required to regain the function after the system's failure. This time is acceptable, considering the Frequency and adequacy of the RCS water inventory balance required by Required Action A.1.

B.1.1, B.1.2, and B.2

With the containment atmosphere particulate radioactivity monitoring instrumentation channel inoperable, alternative action is required. Either samples of the containment atmosphere must be taken and analyzed or water inventory balances, in accordance with SR 3.4.13.1, must be performed to provide alternate periodic information. Samples of the containment atmosphere are obtained and analyzed for gaseous and particulate radioactivity or a gamma isotopic analysis of the containment atmosphere may be performed using the Post Accident Sampling System.

With a sample obtained and analyzed or water inventory balance performed every 24 hours, the reactor may be operated for up to 30 days to allow restoration of the required containment atmosphere particulate radioactivity monitor.

BASES

ACTIONS

B.1.1, B.1.2, and B.2 (continued)

The 24 hour interval provides periodic information that is adequate to detect leakage. A Note is added allowing that SR 3.4.13.1 is not required to be performed until 12 hours after establishing steady state operation (near operating rated operating pressure with stable RCS pressure, temperature, power level, pressurizer and makeup tank level, makeup and letdown, and RCP seal injection and return flows). The 12 hour allowance provides sufficient time to collect and process all necessary data after stable plant conditions are established. The 30 day Completion Time recognizes at least one other form of leakage detection is available.

C.1.1, C.1.2, C.2.1, and C.2.2

With the required containment atmosphere gaseous radioactivity monitor and the required Containment Cooler Condensate Monitoring System inoperable, the means of detecting leakage are the Containment Sump Level and Flow Monitoring System and the containment atmosphere particulate radioactivity monitor. This Condition does not provide all the required diverse means of leakage detection. With the containment atmosphere radioactivity monitoring and Containment Cooler Condensate Monitoring System instrumentation channels inoperable, alternative action is required. Either samples of the containment atmosphere must be taken and analyzed or water inventory balances, in accordance with SR 3.4.13.1, must be performed to provide alternate periodic information. Samples of the containment atmosphere are obtained and analyzed for gaseous and particulate radioactivity or a gamma isotopic analysis of the containment atmosphere may be performed using the Post Accident Sampling System. A Note is added allowing that SR 3.4.13.1 is not required to be performed until 12 hours after establishing steady state operation (near operating rated operating pressure with stable RCS pressure, temperature, power level, pressurizer and makeup tank level, makeup and letdown, and RCP seal injection and return flows). The 12 hour allowance provides sufficient time to collect and process all necessary data after stable plant conditions are established. The followup Required Action is to restore either of the inoperable required monitoring methods to OPERABLE status within 30 days to regain the intended leakage detection diversity. The 30 day Completion Time ensures that the plant will not be operated in a reduced configuration for a lengthy time period.

Refer to LCO 3.3.6, "Containment Purge Isolation Instrumentation," upon a loss of the required containment atmosphere radioactivity monitor to ensure LCO requirements are met.

ATTACHMENT IV
REVISED TECHNICAL SPECIFICATION PAGES

5.0 ADMINISTRATIVE CONTROLS

5.5 Programs and Manuals

The following programs shall be established, implemented, and maintained.

5.5.1 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release Reports required by Specification 5.6.2 and Specification 5.6.3.

Licensee initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 1. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and
 2. a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;
- b. Shall become effective after the approval of the Plant Manager; and
- c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

(continued)

LIST OF COMMITMENTS

The following table identifies those actions committed to by Wolf Creek Nuclear Operating Corporation (WCNOC) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Tony Harris, Manager Regulatory Affairs at Wolf Creek Generating Station, (316) 364-4038.

COMMITMENT	Due Date/Event
<p>WCNOC has developed contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. A description of the contingency plans will be contained in the radiological emergency response plan or emergency plan implementing procedures and implemented with the implementation of the License amendment. Establishment of contingency plans is considered a regulatory commitment.</p>	<p>12/01/2001</p>
<p>The capability for classifying fuel damage events at the Alert level threshold has been established at 2 - 5% fuel clad damage. This level of core damage is associated to radioactivity levels of 300 $\mu\text{Ci/cc}$ dose equivalent iodine. This capability will be described in emergency plan implementing procedures and implemented with the implementation of the License amendment. The capability for classifying fuel damage events is considered a regulatory commitment.</p>	<p>12/01/2001</p>
<p>WCNOC has established the capability to monitor radioactive iodines that have been released to offsite environs. This capability is described in our emergency plan implementing procedures. The capability to monitor radioactive iodines is considered a regulatory commitment.</p>	<p>Complete</p>