

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Terry J. Garrett
Vice President, Engineering

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RULES AND DIRECTIVES
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USNRC

Chief, Rulemaking, Directives and Editing Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, DC 20555-0001

Reference: 1) Letter ET 06-0038, dated September 27, 2006, from T. J. Garrett, WCNO, to USNRC

2) Letter dated February 1, 2008, from USNRC to T. J. Garrett, WCNO

Subject: Docket No. 50-482: Comments on Safety Evaluation Report with Open Items Related to the License Renewal of Wolf Creek Generating Station, Unit 1

Sir:

Wolf Creek Nuclear Operating Corporation (WCNO) submitted in Reference 1, an application to renew the Wolf Creek Generating Station (WCGS) operating license. The Nuclear Regulatory Commission has reviewed the WCNO License Renewal Application (LRA) and prepared a Safety Evaluation Report (Reference 2).

WCNO has reviewed Reference 2 and has developed comments for NRC consideration. WCNO's comments are provided in the Attachment. WCNO addressed all open items in a separate submittal.

SUNSI Review Complete

Template = ADM-013

FRIDS = ADM-03

Call = C. Jacobs
(255)

This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4084, or Mr. Richard Flannigan at (620) 364-4117.

Sincerely,

A handwritten signature in black ink, appearing to read "TJG", written over a faint, illegible background.

Terry J. Garrett

TJG/rlt

Attachment: Comments on Safety Evaluation Report with Open Items Related to the License
Renewal of Wolf Creek Generating Station

cc: E. E. Collins (NRC), w/a
V. G. Gaddy (NRC), w/a
B. K. Singal (NRC), w/a
T. M. Tran (NRC), w/a
Senior Resident Inspector (NRC), w/a
Document Control Desk (NRC), w/a

Attachment

**Comments on Safety Evaluation Report with Open Items Related to the License
Renewal of Wolf Creek Generating Station, Unit 1**

Page 2-2, Section 2.1.3

LRA Section 2.2 provides only tables of system and structures in scope, not a description of the process for identifying structures, systems and components (SSCs).

Page 2-4, Section 2.1.3.1.2

License Renewal "project instruction report" should be "project instruction". The SER is referring to project instruction PI-1 for Scoping and Screening activities.

Page 2-136, Section 2.3.4.2.1

List of components for the main steam system within the scope of license renewal and subject to AMR should include flex hoses, pump, sight glass, silencer, and tank.

List of main steam intended functions for components within the scope of license renewal should also include direct flow.

Page 2-142, Section 2.3.4.4.1

Second paragraph

Portions of the condensate storage and transfer system and portions of the condensate system also support fire protection and station blackout requirements based on the criteria of 10 CFR 54.4(a)(3).

Page 2-142, Section 2.3.4.4.1

List of condensate storage and transfer system components within the scope of license renewal and subject to AMR should also include a rupture disc.

Page 2-146, Section 2.3.4.6.1

List of auxiliary feedwater components within the scope of license renewal and subject to AMR should also include a spacer ring.

Page 3-3 & 3-4 Section 3.0.1.2 items (7) and (8)

Page 3-6 Section 3.0.2.2

Instead of a blank, a "None" is entered for items that could not be correlated to a line in NUREG-1801 Volume 2, GALL Report

Page 3-10, Table 3.0.3-1

Reactor Coolant System Supplement B2.1.35, The second and third columns should be marked "NA" to be consistent with the WCGS LRA instead of "New" and "Plant-Specific". This is a commitment that "supplements" AMPs. A 10 element AMP evaluation has not been performed to evaluate B2.1.35.

Page 3-10, Table 3.0.3-1

Environmental Qualification B3.2 should be consistent. The one enhancement was deleted. See SER Section 3.0.3.2.25 for discussion.

Page 3-8, Table 3.0.3-1

Steam Generator Tube Integrity B2.1.8 should be consistent with "exception", not "exceptions."

Page 3-10, Table 3.0.3-1

Structures Monitoring Program B2.1.32 is consistent with "enhancements", not "enhancement."

Page 3-133, Section 3.3.2.24 (Section cited by Section 4.3.1.1.2 page 4-12)
Fatigue Monitoring ("Metal Fatigue of Reactor Coolant Pressure Boundary"). Two lines read:

- reactor trip - no inadvertent
- cooldown with turbine over-speed

The line should read:

- reactor trip - no inadvertent cooldown with turbine over-speed

Page 3-166, Table 3.1-1, Item 3.1.1.30

In WCGS LRA, AMP B2.1.2 is also credited for this line item besides B2.1.35.

Page 3-166, Table 3.1-1, Item 3.1.1.31

In WCGS LRA, AMP B2.1.1, B2.1.2 and B2.1.34 are also credited for this line item besides B2.1.35.

Page 3-166, Table 3.1-1, Item 3.1.1.37

In WCGS LRA, AMP B2.1.2 is also credited for this line item besides B2.1.35.

Page 3-184, Section 3.1.2.2

Page 3-225, Section 3.2.2.2

Page 3-269, Section 3.3.2.2

Page 3-321, Section 3.4.2.2

Page 3-355, Section 3.5.2.2

Page 3-397, Section 3.6.2.2

First paragraph should be revised to delete "aging effects" or the bullet for "QA for aging management....." should be deleted

Page 4-30, Section 4.3.2.7.4

Staff SER conclusion of its review of 4.3.2.7, "ASME Code Section III Class 1 Piping and Piping Nozzles": This conclusion:

"On the basis of the staff's review, as discussed above relative to thermowells, surge line nozzles, and the pressurizer surge line, the applicant has demonstrated that pursuant to 10 CFR 54.21(c)(1)(iii) and for ASME Code Section III Class 1 piping and piping nozzles, the analyses for these items remain valid for the period of extended operation. Pending the resolution of OI 4.3-3 relative to the remaining Class 1 piping pressure boundary items, the applicant has demonstrated that pursuant to 10 CFR 54.21(c)(1)(iii), the effects of aging on the intended function will be adequately managed for the period of extended operation." is stated incorrectly.

It conflicts with the staff's preceding description of their review. In fact only the TLAAs of the thermowells (and crossover leg nozzle cap not mentioned here, see page 4-28) were validated. Suggest the following wording:

'On the basis of the staff's review, as discussed above relative to thermowells, surge line nozzles, and the pressurizer surge line, the applicant has demonstrated that pursuant to 10 CFR 54.21(c)(1)(iii) and for ASME Code Section III Class 1 piping and piping nozzles, the analyses for these items thermowells remains valid for the period of extended operation. Pending the resolution of OI 4.3-3 relative to the remaining Class 1 piping pressure boundary items, the applicant has demonstrated that pursuant to 10 CFR 54.21(c)(1)(iii),

the effects of aging on the intended function will be adequately managed for the period of extended operation.”

Page 4-60, Section 4.8

The conclusion statement, “In addition, the staff concludes, as required by 10CFR54.21(c)(2), that no plant-specific, TLAA-based exemptions are in effect.” is inconsistent with the statement on page 4-3 that, “.there is one TLAA-based exemption that is justified for continuation through the period of extended operation.”

Appendix A Commitment 21, Subsection 1) 1

“Review of fatigue usage calculations”: This paragraph appears to contain typographical and formatting errors. It reads:

1. Review of fatigue usage calculations.-
* To determine whether the transient in question contributes significantly to CUF " To identify the components and analyses affected by the transient in question. " To ensure that the analytical bases of the leak-before-break (LBB) fatigue crack propagation analysis and of the high-energy line break (HELB) locations are maintained.

This should read:

1. Review of fatigue usage calculations
 - To determine whether the transient in question contributes significantly to CUF
 - To identify the components and analyses affected by the transient in question.
 - To ensure that the analytical bases of the leak-before-break (LBB) fatigue crack propagation analysis and of the high-energy line break (HELB) locations are maintained.

However, this detail is correctly represented in Section 4.3.1.3.2, page 4-15; and in Section 3.3.2.24 page 3-132.

Appendix A Commitment 21, Subsection 2) 7, sixth asterisk

- * Reactor Trip - Cooldown with SI • Inadvertent RCS Depressurization

These are separate events. This should read:

- * Reactor Trip - Cooldown with SI
- * Inadvertent RCS Depressurization

However, this detail is correctly represented in Section 4.3.1.3.2, page 4-16; and in Section 3.03.2.24, page 3-133.

Editorial

- 1) Page xv – there is an abbreviation used twice in the SER that is not on the list – CISI should be defined and added. CISI = Containment Inservice Inspection
- 2) Page 1-9 – the third license condition, second sentence states, “Any changes to the capsule withdrawal schedule, ...” Later on page 4-4 and 4-5 the SER states that the capsules are all withdrawn. Recommend the second sentence be revised to state, “Any changes to the capsule insertion and withdrawal schedule, including use of spare capsules, must be approved by the staff prior to implementation.”
- 3) Page 2-15 – middle of the page the sentence, delete the word “in” from the following sentence, “By letter dated August 31, 2007, the applicant amended the LRA to include these drain pipes within the scope of license renewal.”
- 4) Page 2-22, Section 2.1.4.5.1, Line 7, 10CFR54.5 (a) should be 10CFR54.4(a).
- 5) Page 2-55, Section 2.3.2.7.2, Typo – Section number 2.3.2.4 should be 2.3.2.7.
- 6) Page 2-133 (5th paragraph), 2.3.3.21K should be 2.3.3.21.
- 7) Page 3-69, Section 3.0.3.3.1 Steam Generator Tube Integrity, should be Section 3.0.3.2.8, Steam Generator Tube Integrity.
- 8) Page 3-163, Table 3.1.1, Item 3.1.1-16, last column, the Section number should be 3.1.2.2.2.4 instead of 3.1.2.2.4.
- 9) Page 3-218, Table 3.2.1, Item 3.2.1-34, the AMP in LRA should be “NA” and Staff Evaluation should be “Not applicable to PWR.”
- 10) Page 4-37, recommend revising the sentence, “Currently, there is no analysis to address all these affects of aging.” By substituting “TLAA” for “analysis.”
- 11) Page 4-56 and 4-57, delete the comma from the description of the “fuel building cask, handling crane.” This typo occurs in 5 places on these two pages.