

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Terry J Garrett
Vice President, Engineering

April 14, 2006

ET 06-0018

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

- Reference:
- 1) Letter WO 03-0057, dated October 30, 2003, from B. T. McKinney, WCNOG, to the NRC
 - 2) Letter ET 05-0016, dated August 31, 2005, from T. J. Garrett, WCNOG, to the NRC
 - 3) Letter ET 05-0025, dated November 18, 2005, from T. J. Garrett, WCNOG, to the NRC
 - 4) Letter WO 06-0014, dated March 6, 2006, from S. E. Hedges, WCNOG, to the NRC

Subject: Docket No. 50-482: Additional Information Concerning Revision to Technical Specifications – Extensions of AC Electrical Power Distribution Completion Times

Gentlemen:

Reference 1 provided Wolf Creek Nuclear Operating Corporation's (WCNOG) application to revise Technical Specification (TS) 3.8.1, "AC Sources – Operating," to extend the Completion Times for the Required Actions associated with an inoperable diesel generator (DG). The amendment application also proposed revising TS 3.8.9, "Distribution Systems – Operating," to extend the Completion Time for one AC vital bus subsystem inoperable. Reference 2 provided responses to a request for additional information and information per Appendix E of Nuclear Regulatory Commission (NRC) letter dated July 1, 2005, "Draft Safety Evaluation for Topical Report WCAP-15622, "Risk-Informed Evaluation of Extensions to AC Electrical Power System Completion Times" (TAC NO. MB2257)." Reference 3 proposed additional changes to TS 3.8.1 and the associated TS Bases to provide additional requirements associated with the Sharpe Station. Reference 4 provided responses to additional NRC questions, revised the Completion Time to proposed Required Action B.4.2.1, and proposed conditions to the operating license.

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On March 13, 2006, WCNOG received an additional question by electronic mail from the NRC Project Manager concerning the reactor coolant pump seal model utilized in the 1998 Wolf Creek Generating Station (WCGS) Probabilistic Safety Assessment (PSA) Model. As a result of further review of the question and discussions with NRC personnel on March 24, 2006, WCNOG is proposing an additional license condition to address updating of the PSA Model utilizing WCAP-15603, Rev. 1-A, "WOG 2000 Reactor Coolant Pump Seal Leakage Model for Westinghouse PWRs." Attachment I provides additional information in response to the question.

Attachment II contains a list of commitment for this submittal. If you have any questions concerning this matter, please contact me at (620) 364-4084, or Mr. Kevin Moles at (620) 364-4126.

Very truly yours,



Terry J. Garrett


TJG/rlt

Attachments

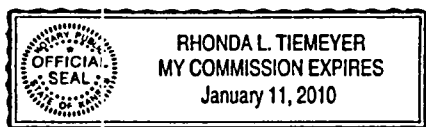
cc: T. A. Conley (KDHE), w/a
J. N. Donohew (NRC), w/a
W. B. Jones (NRC), w/a
B. S. Mallett (NRC), w/a
Senior Resident Inspector (NRC), w/a

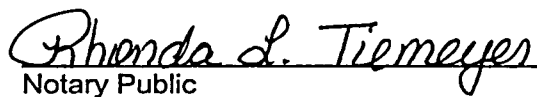
STATE OF KANSAS)
) SS
COUNTY OF COFFEY)

Terry J. Garrett, of lawful age, being first duly sworn upon oath says that he is Vice President Engineering of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the contents thereof; that he has executed the 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 
Terry J. Garrett
Vice President Engineering

SUBSCRIBED and sworn to before me this 14 day of April, 2006.




Notary Public

Expiration Date January 11, 2010

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

1. It appears that WCNOG is using the W6211-08/99 "Brookhaven" RCP seal model for the Wolf Creek seals. The RCP seal model is addressed in WCNOG letters in Attachment I of WO 03-0057 (page 15 of 23) and Attachment I to ET 05-0016 (page 6 of 26). The letter ET 05-0016 addressed the information specified in the draft SE for WCAP-15622 for plant-specific applications.

In Appendix C of the draft SE for WCAP-15622, the RCP seal model used by licensee was addressed and there is the statement at the end in the third paragraph of the draft SE. The statement is "The NRC SE [on WCAP-15622] also cautions that, for plants using RCP models other than the Rhodes model or WOG-2000 model, a licensee must provide justification for its model ..."

In completing its SE for the LAR, it has been determined that your "justification" for the Wolf Creek RCP seal model in letters WO 03-0057 and ET 05-0016 is not sufficient.

RESPONSE: As discussed in letter ET 05-0016, at the time of the development of the calculation to support an extended diesel generator (DG) Completion Time, the 1998 Wolf Creek Generating Station (WCGS) Probabilistic Safety Assessment (PSA) Model utilized a reactor coolant pump (RCP) model developed similar to the one presented in Chapter 10 of WCAP-10541, Rev. 2, with conservatism incorporated to address NRC concerns. The calculation utilized RCP seal failure values based on "Guidance Document for Modeling of RCP Seal Failures," Brookhaven National Laboratory Technical Report W6211-08/99, and also assumed that the RCP seals are composed of the newer qualified high-temperature seal material.

Since the submittal of this license amendment request, Wolf Creek Nuclear Operating Corporation (WCNOG) has been in the process of updating the WCGS PSA Model (also referred to as the 2002 WCGS PSA Model) and expects to have this 2002 WCGS PSA Model completed and approved in the near future. WCNOG has determined that the best approach for addressing the use of an updated RCP seal model is to ensure the 2002 WCGS PSA Model utilizes WCAP-15603, Rev. 1-A, "WOG 2000 Reactor Coolant Pump Seal Leakage Model for Westinghouse PWRs." WCNOG would then verify that the utilization of the Sharpe Station for supporting an extended DG Completion Time meets the risk acceptance guidelines of Regulatory Guide 1.174 and Regulatory Guide 1.177. This would be performed prior to the first use of exercising the DG 7-day Completion Time of Required Action B.4.2.2 for pre-planned maintenance activities.

Based on discussion with the NRC, WCNOG agrees to the conditioning of the operating license to include this requirement. In addition, it was requested that the commitment to include the risk impact of the Sharpe Station in the Safety monitor be incorporated into a condition of the license. As such, WCNOG proposes that Appendix D to the operating license include the following condition:

The licensee will ensure the RCP seal model from WCAP-15603, Rev. 1-A, "WOG 2000 Reactor Coolant Pump Seal Leakage Model for Westinghouse PWRs" is utilized in the 2002 WCGS PSA Model. The licensee will verify that the utilization of the Sharpe Station for supporting an extended DG Completion Time in the 2002 WCGS PSA Model meets the risk acceptance guidelines of Regulatory Guide 1.174 and Regulatory Guide 1.177. Additionally, the licensee will include the risk impact of the Sharpe Station in the Safety

Monitor, including adding an activity to the Activity Table that will account for the impact of the plant configuration associated with crediting the Sharpe Station during the use of an extended Completion Time for pre-planned maintenance activities.

Implementation Date: Prior to the first use of the 7-day Completion Time of Required Action B.4.2.2 of TS 3.8.1.

LIST OF COMMITMENTS

The following table identifies those actions committed to by 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. Kevin Moles at (620) 364-4126.

COMMITMENT	Due Date/Event
Ensure the 2002 WCGS PSA Model utilizes WCAP-15603, Rev. 1-A, "WOG 2000 Reactor Coolant Pump Seal Leakage Model for Westinghouse PWRs." WCNOC would then verify that the utilization of the Sharpe Station for supporting an extended DG Completion Time meets the risk acceptance guidelines of Regulatory Guide 1.174 and Regulatory Guide 1.177.	Prior to first use of exercising the 7-day Completion Time for pre-planned maintenance activities.