

# **WOLF CREEK**

NUCLEAR OPERATING CORPORATION

Terry J. Garrett  
Vice President, Engineering

August 26, 2008

ET 08-0043

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

Reference: Letter ET 08-0038, dated July 10, 2008, from T. J. Garrett, WCNOG, to USNRC

Subject: Docket No. 50-482: Submittal of Supplemental Information on Proposed Changes to Technical Specifications

Gentlemen:

The Reference provided a license amendment request that proposed revisions to Technical Specification (TS) 1.1, "Definitions," and TS 5.6.6, "Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR). Reference 1 proposed changes to these TSs consistent with Nuclear Regulatory Commission (NRC) approved Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-419, "Revise PTLR Definition and References in ISTS 5.6.6, RCS PTLR," Revision 0.

On July 29, 2008, the NRC Project Manager requested by electronic mail supplemental information regarding Reference 1. In subsequent discussions between Wolf Creek Nuclear Operating Corporation (WCNOG) and the NRC, WCNOG agreed to provide the requested supplemental information. The Attachment provides the supplemental information.

The information provided in the Attachment does not impact the conclusions of the No Significant Hazards Consideration provided in the Reference. In accordance with 10 CFR 50.91, a copy of the submittal is being provided to the designated Kansas State official.

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

Sincerely,

A handwritten signature in black ink, appearing to read "TJG", with a stylized flourish at the end.

Terry J. Garrett


TJG/

Attachment

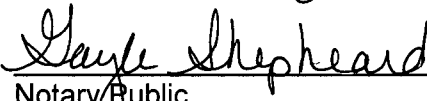
cc: E. E. Collins (NRC), w/a  
T. A. Conley (KDHE), w/a  
V. G. Gaddy (NRC), w/a  
B. K. Singal (NRC), w/a  
Senior Resident Inspector (NRC), w/a

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 26<sup>th</sup> day of August, 2008.

  
Notary Public



Expiration Date 7/24/2011

### Supplemental Information

**Question:** The referenced submittal [WCNOC letter ET 08-0038, dated July 10, 2008] cites Regulatory Guide (RG) 1.190, "Calculational and Dosimetry Techniques for Determining Pressure Vessel Neutron Fluence," as an applicable regulatory criterion. Please describe how the fluence determination used to support this license amendment request adheres to the guidance of RG 1.190.

**Response:** The calculated fluence provided in the Wolf Creek Generating Station (WCGS) Pressure and Temperature Limits Report, Rev. 0, is based on WCAP-15078, Revision 1, "Analysis of Capsule V from the Wolf Creek Nuclear Operating Corporation Wolf Creek Reactor Vessel Radiation Surveillance Program," dated September 1998. The calculated fluence conforms with the methodology described in WCAP-14040-NP-A, "Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and RCS Heatup and Cooldown Limit Curves," Revision 2. The Nuclear Regulatory Commission (NRC) reviewed this methodology specific to WCGS as documented in the NRC safety evaluation dated December 2, 1999, Section 3.1.

The fluence methodology for WCAP-14040-NP-A, Rev. 2, is based on the guidance in DG-1053, "Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence." DG-1053 is the predecessor to Regulatory Guide 1.190.

Wolf Creek Nuclear Operating Corporation (WCNOC) submitted WCAP-16028, Rev. 0, "Analysis of Capsule X from Wolf Creek Nuclear Operating Corporation, Wolf Creek Reactor Vessel Radiation Surveillance Program," on April 8, 2003 (letter RA 03-0041). Section 6.1 of the WCAP indicates that the neutron transport and dosimetry evaluation methodologies follow the guidance and meet requirements of Regulatory Guide 1.190, Rev. 0. Additionally, this section indicates that the methods used to develop the calculated pressure vessel fluence are consistent with the NRC approved methodology described in WCAP-14040-NP-A, Revision 2. At the time of development of WCAP-16028, the NRC staff had not yet approved the submitted Revision 3 of WCAP-14040.

In discussions with Westinghouse Electric Company personnel, it was identified that there are minor differences between Revision 2 and Revision 4 of WCAP-14040 with respect to the neutron fluence methodology. These differences being:

1. Revision 2 utilized the BUGLE-93 cross-section library for the transport calculation. Revision 4 utilized the more current BUGLE-96 cross-section library.
2. Revision 2 utilized Equation 3 from DG-1053 (now Regulatory Guide 1.190) for the synthesis of the 3-D fluence. Revision 4 utilizes Equation 4 from Regulatory Guide 1.190.

However, Westinghouse personnel have indicated that these two minor differences do not yield any significant difference in the results of the fluence calculation.

Based upon the above, it is concluded that the fluence methodologies used for evaluating Capsule V and Capsule X adhere to the guidance in Regulatory Guide 1.190.