

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

Richard A. Muench  
Vice President Technical Services

**NOV 27 2001**

ET 01-0033

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

Reference: Letter ET 01-0023, dated July 16, 2001, from R. A. Muench, WCNOC, to USNRC

Subject: Docket No. 50-482: Response to Request for Additional Information Regarding Relief Request I2R-24, Use of Code Case N-597, for Analytical Evaluation of Wall Thinning of Piping Items

Gentlemen:

The Reference submitted a request to use an alternative to the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, IWA-3000. The proposed alternative is the use of ASME Section XI Code Case N-597 for the analytical evaluation of wall thinning of piping items.

In an electronic mail message received August 23, 2001, Mr. Jack Donohew, NRC Project Manager, requested additional information concerning the Reference. Wolf Creek Nuclear Operating Corporation (WCNOC) responded with an electronic mail message on September 14, 2001, and provided the requested information. Following a telephone conversation on September 26, 2001, WCNOC provided Mr. Donohew with informational copies of WCNOC procedures which describe WCNOC's Flow Accelerated Corrosion (FAC) Program and Quality Program. During telephone conversations on October 18, 2001 and November 9, 2001, WCNOC clarified that Code Case N-597 will be applied only to ASME Class 2 and 3 components, and that the Code Case will not be applied to non-FAC degradation. In addition, WCNOC provided clarification concerning use of the words "should" and "shall" in WCNOC's procedures for the FAC Program.

Attachment I to this letter provides a summary of the information requested and discussed.

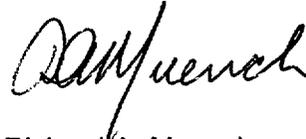
Attachment II contains commitments identified in this letter.

A0 47

ET 01-0033  
Page 2 of 2

If you have any questions concerning this matter, please contact me at (620) 364-4034, or Mr. Tony Harris at (620) 364-4038.

Very truly yours,



Richard A. Muench

RAM/rir

Attachments

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

**REQUEST FOR ADDITIONAL INFORMATION**

**RELIEF REQUEST I2R-24, USE OF CODE CASE N-597**

The following request for additional information is based on Wolf Creek Nuclear Operating Corporation's (WCNOC) request dated July 16, 2001, for relief from Section XI, IWA-3000, of the American Society of Mechanical Engineers (ASME) Code. The request for relief is to use Code Case N-597, "Requirements for Analytical Evaluation of Pipe Wall Thinning, Section XI, Division 1."

**QUESTION 1:**

Will the relief request apply the code case only to Class 2 and 3 components?

**RESPONSE:**

Yes.

**QUESTION 2:**

For flow-accelerated corrosion (FAC), it appears that the code case will be implemented through the FAC program, which is based on NSAC-202L-R2. Discuss what is meant by the use of "should" and "shall" in the NSAC document, because the FAC program procedures would follow the recommendations in that document.

**RESPONSE:**

The WCNOC procedure which will govern the FAC program is AP 23H-002, "Flow Accelerated Corrosion Program." As part of WCNOC's implementation of the approved relief request, WCNOC will capture the following within AP 23H-002:

Shall – denotes a requirement or a mandatory activity.

Should – used to indicate firm WCNOC management expectations. Deviation from these expectations is a departure from the norm and requires supervisory concurrence. Deviations will be noted and approved in writing, which may include logs, procedures, work orders, memos, etc.

These definitions are applicable to WCNOC FAC procedures and to NSAC 202L, Revision 2, "Recommendations for an Effective Flow-Accelerated Corrosion Program."

From an internal implementation perspective, specific to the WCNOC FAC program, the use of the word "should" carries the same weight and importance as that of "shall." Therefore, the procedure user should not misconstrue the use of the word "should" as being an activity that may be casually dismissed or waived. The use of these two different terms is simply a mechanism to distinguish actions that have a direct regulation or commitment basis versus those which do not.

QUESTION 3:

Discuss the commitments related to Branch Technical Position (BTP) MEB 3-1 of Standard review Plan 3.6.2, "Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping," and where these commitments are in the Updated Safety Analysis Report for Wolf Creek Generating Station. Discuss the impact of the code case on these commitments.

RESPONSE:

The WCNOG commitments to the BTP MEB 3-1 are found in the Wolf Creek Generating Station (WCGS) Updated Safety Analysis Report, section 3.6.2, "Determination of the Break Locations and Dynamic Effects Associated with the Postulated Rupture of Piping." The MEB 3-1 criteria associated with allowable stress limits are the only commitments that would be impacted by the use of Code Case N-597.

For cases where a degraded condition is identified which does not comply with these augmented design requirements, yet the condition is determined by evaluation in accordance with Code Case N-597 to be acceptable for service, WCNOG proposes that the item be allowed to remain in service for one fuel cycle. Repair or replacement of the item during the subsequent refueling outage will be to the original design requirements, including the augmented stress limit requirements of MEB 3-1.

QUESTION 4:

It appears, according to the fourth paragraph of page 2 of Attachment I to the relief request, that the code case will be applied to types of corrosion other than FAC corrosion. Discuss the implementation of the code case for non-FAC corrosion in terms of the program, program description, and criteria. If the code case is to be implemented through the inservice inspection (ISI) program, discuss what Section XI requirements will be applied to qualifying and sizing the remaining wall thickness of the degraded areas, and what methods, including their bases, will be used to calculate the rate of wall thinning.

RESPONSE:

WCNOG will apply the provisions of ASME Code Case N-597 only to components affected by FAC mechanisms. WCNOG understands that prior NRC approval is required to apply the provisions of Code Case N-597 to non-FAC degradation mechanisms.

**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, (620) 364-4038.

<b>COMMITMENT</b>	<b>Due Date/Event</b>
<p>The WCNOC procedure which will govern the FAC program is AP 23H-002, "Flow Accelerated Corrosion Program." As part of WCNOC's implementation of the approved relief request, WCNOC will capture the following within AP 23H-002:</p> <p>Shall – denotes a requirement or a mandatory activity.</p> <p>Should – used to indicate firm WCNOC management expectations. Deviation from these expectations is a departure from the norm and requires supervisory concurrence. Deviations will be noted and approved in writing, which may include logs, procedures, work orders, memos, etc.</p> <p>These definitions are applicable to WCNOC FAC procedures and to NSAC 202L, Revision 2, "Recommendations for an Effective Flow-Accelerated Corrosion Program."</p> <p>From an internal implementation perspective, specific to the WCNOC FAC program, the use of the word "should" carries the same weight and importance as that of "shall". Therefore, the procedure user should not misconstrue the use of the word "should" as being an activity that may be casually dismissed or waived. The use of these two different terms is simply a mechanism to distinguish actions that have a direct regulation or commitment basis versus those which do not.</p>	<p>Within 60 days of approval of the relief request.</p>