WOLF CREEK
NUCLEAR OPERATING CORPORATION

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ET 06-0017

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

References: 1) Letter ET 05-0014, dated September 28, 2005, from T. J. Garrett, WCNOC, to USNRC

Subject: Docket 50-482: Wolf Creek Nuclear Operating Corporation's Response to Request for Additional Information Regarding 10 CFR 50.55a Request Number I3R-03 – Request for Relief to Allow Use of Alternate Requirements for Snubber Inspection and Testing

Gentlemen:

The Reference provided Wolf Creek Nuclear Operating Corporation (WCNOC) 10 CFR 50.55a Request Number I3R-03, which requested an alternative to the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI for inservice inspection and testing of snubbers for the third 10-year interval of WCNOC's Inservice Inspection (ISI) Program.

On February 1, 2006, the NRC Project Manager for WCNOC provided by electronic mail a request for additional information regarding 10 CFR 50.55a Request Number I3R-03.

The Attachment to this letter provides WCNOC's response to the request for additional information. It lists each NRC question followed by WCNOC's response to each of those questions.

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There are no commitments associated with 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

Attachment

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

Response to Request for Additional Information Regarding 10 CFR 50.55a Request Number I3R-03

1. Request for Additional Information

For Item 3(a), the licensee states that an alternative is requested for the preservice/inservice examination requirements of ASME/OM Part 4. Identify for which specific section(s) of ASME/OM Part 4 that relief from is being requested.

1. Response

It is requested that all preservice/inservice snubber examinations be performed under the Wolf Creek Generating Station (WCGS) Technical Requirements Manual (TRM) Section 3.7.20, "Snubbers," and implementing procedures in lieu of Section 2, "Examination Requirements" of ASME/OM Part 4.

2. Request for Additional Information

For Item 3(b), the licensee requests an alternative for the preservice/inservice test requirements of ASME/OM Part 4. Identify for which specific section(s) of ASME/OM Part 4 that relief from is being requested.

2. Response

It is requested that all preservice/inservice snubber testing be performed under the WCGS TRM Section 3.7.20, "Snubbers," and implementing procedures in lieu of Section 3, "Testing Requirements", of ASME/OM Part 4.

3. Request for Additional Information

For Item 3(c), the licensee requests an alternative for "Third-party Authorized Inspection Agency inspection activities for snubber examination and testing in accordance with IWA-2210." Verify whether the referenced IWA-2210 should be IWA-2120.

3. Response

The Reference should be "IWA-2110" and not "IWA-2210" or "IWA-2120."

4. Request for Additional Information

Under Item 5, "Proposed Alternative and Basis for Use," paragraph 2, the licensee states that this relief is only for snubbers (pin-to-pin), and the remaining portion of the support, including integral and nonintegral attachments will be examined in accordance with Section XI, IWF. Under Item 5A, third paragraph the licensee states "Visual inspection shall verify: 2) Attachment to the foundation or support structure are functional". Clarify which program (Section XI, IWF or TRM) is being used for the remaining portion of the support, including integral and nonintegral attachments.

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4. Response

The WCGS Inservice Inspection (ISI) Program plan visually examines (VT-3) the ASME Section III NF portion of the supports in accordance with Subsection IWF, but excludes the snubber and its fasteners to the structural and component attachments. The WCGS Snubber TRM program visually examines the snubber, including the snubber attachment to the foundation or supporting structure up to and including the fasteners for connecting the snubbers to the pipe attachment or component attachment, whether it is integral or non-integral. The structural attachment and weld are examined under the ISI Program and the snubber TRM program. Since the snubber TRM visual examinations are generally conducted more frequently then the ISI Program plan examinations, the overlap in examinations provides additional conservatism in the overall program.

5. Request for Additional Information

Under Item 5A, "Visual Snubber Examinations" first paragraph, the licensee states that the Wolf Creek Technical Requirements Manual (TRM) Snubber Program Visual inspection requirements for snubbers are comparable with Section XI, VT-3 requirements. Subsequently the licensee states "The TRM snubbers inspections are performed by personnel that are certified to perform Visual, VT-3 examination per IWA-2300." Explain the differences between the proposed TRM snubber examination and the Code required VT-3 examination.

5. Response

The TRM snubber examination and the VT-3 examination of IWA 2300 are similar in practice. The procedure demonstration and access requirements of IWA-2210 are not incorporated into the TRM Snubber examination program. The snubber visual examination attributes are equivalent to those specified in OM Code Subsection ISTD (hereafter referred to as "ISTD"). The following table provides a comparison of ISTD examination attributes and the Wolf Creek Snubber Program Visual examination attributes:

ISTD Examination Attributes	***TRM Snubber Program Attributes***
1. Damage	*1. Visible indications of damage or impaired operability*
2. Corrosion	*2. Corrosion or solid deposits that could result in unacceptable snubber performance*
3. Degradation	*3. Indications of degradation and severe operating environments*
4. Loose fasteners, or members that are corroded or deformed	*4. Loose, missing, or incorrectly installed structural connections or fasteners (and attributes 1 &2 above)*
5. Disconnected components or other conditions that might interfere with proper restraint of movement	*5. Attributes 1 thru 4 above; Spherical bearing not fully engaged in attachment lug, weld arc strikes, paint, weld slag, adhesive or other deposits on indicator tube or support cylinder that could result in unacceptable snubber performance*
6. Binding, misalignment, or deformations	*6. Binding of the snubber in the structural or component attachment (i.e., welded beam attachment (WBA) or pipe clamp), misalignment (in excess of design off-set or installation tolerances)*

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6. Request for Additional Information

Under Item 5A, last paragraph, the licensee states that, "the WCGS TRM also incorporates the reduced visual inspection frequency table as provided in NRC Generic Letter 90-09, which is similar to the provision in OM Code Subsection ISTD". Under Item 5A, fifth paragraph, seventh line, the licensee states that, "the TRM snubber inspections are performed by personnel that are certified to perform Visual, VT-3 examination per IWA-2300." Based on these statements, the licensee may meet the requirements of ISTD and VT-3. Provide the reason(s) for not utilizing OM Code Subsection ISTD for the snubbers.

6. Response

The WCGS Snubber TRM Program provides comprehensive and conservative requirements that are effective in providing a reliable snubber inspection program. As discussed in Item 4 above, there are overlaps between the WCGS Snubber TRM Program and ISI Program for visual examinations of supports containing snubbers. The use of the TRM Program addresses the intent and scope of the requirements in Section XI, IWF-5000 and the OM Code in a single governing document that has been consistently applied at WCGS since plant startup. WCGS uses the TRM Snubber program that encompasses the ASME Snubber Code requirements. This alternative provides acceptable levels of quality and safety. Adoption of the OM Code Subsection ISTD is unnecessary and would create additional administrative burden.

7. Request for Additional Information

Under Item 5B, Snubber Testing, the licensee states that the operational readiness test requirements of snubber of ASME/ANSI OM Part 4 and proposed TRM functional test requirements. The TRM functional test requirements appear to be substantially less than the OM Part 4 requirements. Explain how the proposed TRM functional test requirements are comparable to the operational readiness test requirements of Section 3.2.1.1 of the OM Part 4.

7. Response

Section 3.2.1.1 of the OM Part 4, states:

3.2.1.1 Operability Test. Operability testing of snubbers shall be performed to verify the following:

- *(a) the force that will initiate motion (breakaway force), the force that will maintain low velocity displacement (drag force), or both, as required by the documents of para. 1.5.2, is within specified limits, both in tension and compression;*
- *(b) activation is within the specified range of velocity or acceleration in both tension and compression; and*
- *(c) release rate, where applicable, is within the specified range in tension and compression. For units specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement shall be demonstrated.*

WCGS Procedure MPM M218A-01, "Snubber Functional Test," establishes, in part, a functional testing program to ensure that all mechanical snubbers operate within design parameters. The

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following are the operational test requirements, in part, as presented in Procedure MPM M218A-01:

Acceleration Test Acceptance Criteria - The mechanical snubber shall be capable of limiting acceleration to a maximum of 0.04g's when subjected to any load up to the FULL Rated Load.

Drag Force Test Criteria - The frictional force (drag force) of the snubber to movement shall not exceed 5 percent of the full rated load or as specifically defined in Attachment D, "Snubbers With Limited Allowable Drag Force."

MPM M218A-01 implements the TRM requirement. Therefore, the TRM functional test requirements are comparable to the OM Part 4, Section 3.2.1.1, "Operability Test," requirements. It should be noted that Section 3.2.1.1(c) of OM Part 4 is not applicable to WCGS since the snubber population does not contain hydraulic snubbers and therefore "release rate" is not applicable.

8. Request for Additional Information

Under Item 5D, the licensee states that IWA-6000 is not clear concerning what records and reports are required for snubbers. It should be noted that IWA-6210(c) clearly states that the Owner shall prepare preservice and inservice inspection summary reports for Class 1 and 2 pressure retaining components and their supports. Further, IWA-6210(d) states that the Owner shall prepare the Owner's Report for inservice Inspections, Form NIS-1, for preservice and inservice examination of Class 1 and 2 pressure retaining components and their supports. Because a snubber is a part of a support, all the IWA-6000 requirements are applicable to snubbers.

The licensee states that "the Wolf Creek Quality Assurance maintains records of snubber inspections and tests performed in accordance with TRM and implementing procedures in lieu of the requirements of Section XI and OM Part 4." Provide details and explain how the proposed alternative is comparable with the requirements of Section XI, IWA-6000 and OM Part 4.

8. Response

IWF-5000 separates the inservice/preservice snubber examinations from that required for integral and nonintegral attachments for snubbers. Specifically, IWF-5200(a) and IWF-5300(c) requires that snubber examinations be performed in accordance with OM Part 4, while IWF-5200(c) and IWF-5300(c) specifies that integral and nonintegral attachments for snubbers, including lugs, bolting, pins, and clamps shall be examined in accordance with the requirements of Subsection IWF. Therefore, the recordkeeping requirements for snubbers are controlled per OM Part 4 while integral and nonintegral attachments for snubbers are controlled per Section XI, IWA-6000.

OM Part 4, Section 1.7, "Records and Recordkeeping," states:

> *Record copies of acceptance tests, Design Specifications, operating and maintenance instructions, written inspection procedures, test equipment calibration records,*

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examination results, test results, maintenance records, replacement records, and schedules of inspection shall be maintained and controlled in accordance with the Owners administrative procedures.

WCGS Procedure AP 15A-003, "Records," provides a uniform method for the identification, turnover, change, and control of records. All records associated with the Snubber TRM Program testing and inspections are documented on work documents that are considered Lifetime Quality Assurance Records. Therefore, these records are accountable, accessible, and retrievable at any time. In addition, WCGS Procedure AP 29A-006, "Snubber Program", requires that a report be prepared presenting results of the previous cycle's snubber tests and inspections results.

At WCGS, the records and reports associated with the examinations of integral and nonintegral attachments for snubbers, including lugs, bolting, pins, and clamps will utilize Code Case N-532-1 for the third ISI interval in lieu of IWA-6000, "Records and Reports."

9. Request for Additional Information

Because the TRM does not the provide details as required by OM Part 4, Section 2.3.4 "Inservice Examination Failure Evaluation," explain how the TRM meets this requirement.

9. Response

WCGS Procedure STS MT-011, "Snubber Visual Examination," provides a program for periodic Visual Examination of Mechanical Snubbers to verify structural integrity and the operational readiness. The following are the procedural requirements concerning snubber visual examination failures:

Snubbers which appear inoperable as a result of visual examination shall be classified as unacceptable and may be reclassified acceptable for the purpose of establishing the next visual examination interval, provided that:

1 *The cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers, irrespective of type, that may be generically susceptible; and*

2 *The affected snubber is functionally tested in the as-found condition and determined OPERABLE per TRM Table TR 3.7.20-4, section 3 of the TRM and the unacceptable condition did not affect operation readiness.*

3 *A review and evaluation shall be performed and documented to determine system OPERABILITY with an unacceptable snubber. If OPERABILITY can not be justified, the system shall be declared inoperable and the applicable Technical Specification LCO or Technical Requirements Manual TR shall be considered not met.*

STS MT-011 implements the TRM requirement. Therefore, the TRM requirements for visual examination failures are comparable to the OM Part 4, Section 2.3.4, "Inservice Examination Failure Evaluation," requirements.