

Subcommittee will hear presentations by and hold discussions with the NRC staff, the licensee, Nine Mile Point Nuclear Station, LLC, and other interested persons regarding this matter. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the Full Committee.

Members of the public desiring to provide oral statements and/or written comments should notify the Designated Federal Official (DFO), Peter Wen (Telephone 301-415-2832 or *E-mail: Peter.Wen@nrc.gov*) five days prior to the meeting, if possible, so that appropriate arrangements can be made. Thirty-five hard copies of each presentation or handout should be provided to the DFO thirty minutes before the meeting. In addition, one electronic copy of each presentation should be emailed to the DFO one day before the meeting. If an electronic copy cannot be provided within this timeframe, presenters should provide the DFO with a CD containing each presentation at least thirty minutes before the meeting. Electronic recordings will be permitted only during those portions of the meeting that are open to the public. Detailed procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on October 21, 2010, (75 FR 65038-65039).

Detailed meeting agendas and meeting transcripts are available on the NRC Web site at <http://www.nrc.gov/reading-rm/doc-collections/acrs>. Information regarding topics to be discussed, changes to the agenda, whether the meeting has been canceled or rescheduled, and the time allotted to present oral statements can be obtained from the website cited above or by contacting the identified DFO. Moreover, in view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with these references if such rescheduling would result in a major inconvenience.

If attending this meeting, please enter through the One White Flint North building, 11555 Rockville Pike, Rockville, MD. After registering with security, please contact Mr. Theron Brown (240-888-9835) to be escorted to the meeting room.

Dated: 9/26/11.

**Yoira Diaz-Sanabria,**

*Technical Assistant, Technical Support Branch, Advisory Committee on Reactor Safeguards*

[FR Doc. 2011-25240 Filed 9-29-11; 8:45 am]

**BILLING CODE 7590-01-P**

## **NUCLEAR REGULATORY COMMISSION**

**[NRC-2011-0229]**

### **Metal Fatigue Analysis Performed by Computer Software**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Regulatory issue summary; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is proposing to issue a regulatory issue summary (RIS) to remind its addressees of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (ASME Code) requirements in accordance with Title 10 of the Code of Federal Regulations (10 CFR) 50.55a, "Codes and Standards," and of the quality assurance (QA) requirements for design control in accordance with Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50. Specifically, this RIS informs addressees of the NRC's findings from license renewal and new reactor audits on applicants' analyses and methodologies using the computer software package, WESTEMS™, to demonstrate compliance with Section III, "Rules for Construction of Nuclear Facility Components," of the ASME Code.

**DATES:** Submit comments by October 31, 2011. Comments received after this date will be considered if it is practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

**ADDRESSES:** Please include Docket ID NRC-2011-0229 in the subject line of your comments. For additional instructions on submitting comments and instructions on accessing documents related to this action, see "Submitting Comments and Accessing Information" in the **SUPPLEMENTARY INFORMATION** section of this document. You may submit comments by any one of the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for documents filed under Docket ID NRC-2011-0229. Address questions about NRC dockets to Carol Gallagher,

telephone: 301-492-3668; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

- *Mail comments to:* Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB-05-B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

- *Fax comments to:* RADB at 301-492-3446.

#### **SUPPLEMENTARY INFORMATION:**

#### **Submitting Comments and Accessing Information**

Comments submitted in writing or in electronic form will be posted on the NRC Web site and on the Federal rulemaking Web site, <http://www.regulations.gov>. Because your comments will not be edited to remove any identifying or contact information, the NRC cautions you against including any information in your submission that you do not want to be publicly disclosed.

The NRC requests that any party soliciting or aggregating comments received from other persons for submission to the NRC inform those persons that the NRC will not edit their comments to remove any identifying or contact information, and therefore, they should not include any information in their comments that they do not want publicly disclosed.

You can access publicly available documents related to this document using the following methods:

- *NRC's Public Document Room (PDR):* The public may examine and have copied, for a fee, publicly available documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

- *NRC's Agencywide Documents Access and Management System (ADAMS):* Publicly available documents created or received at the NRC are available online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into ADAMS, which provides text and image files of the NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's PDR reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The draft RIS is available electronically under ADAMS Accession Number ML11252A520.

- *Federal Rulemaking Web site:* Public comments and supporting materials related to this notice can be found at <http://www.regulations.gov> by

searching on Docket ID NRC–2011–0229.

**FOR FURTHER INFORMATION CONTACT:** On Yee, Office of Nuclear Reactor Regulation, Division of License Renewal, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone: 301–415–1905, e-mail: *On.Yee@nrc.gov*.

**Draft NRC Regulatory Issue Summary 2011–Xxxx; Metal Fatigue Analysis Performed by Computer Software**

*Addressees*

All holders of, and applicants for, a power reactor operating license or construction permit under Title 10 of the Code of Federal Regulations (10 CFR) Part 50, “Domestic Licensing of Production and Utilization Facilities,” except those that have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

All holders of, and applicants for, a power reactor early site permit, combined license, standard design certification, standard design approval, or manufacturing license under 10 CFR Part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants.”

*Intent*

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to remind addressees of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (ASME Code) requirements in accordance with 10 CFR 50.55a, “Codes and Standards,” and of the quality assurance (QA) requirements for design control in accordance with Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants,” to 10 CFR part 50. Specifically, this RIS informs addressees of the NRC’s findings from license renewal and new reactor audits on applicants’ analyses and methodologies using the computer software package, WESTEMS™, to demonstrate compliance with Section III, “Rules for Construction of Nuclear Facility Components,” of the ASME Code. The NRC expects addressees to review this RIS for applicability to their facilities and to consider actions as appropriate. This RIS requires no action or written response from addressees.

*Background Information*

Section 54.21 of 10 CFR, “Contents of Application—Technical Information,” requires applicants for license renewal to perform an evaluation of time-limited aging analyses relevant to structures,

systems, and components within the scope of license renewal. In most cases, fatigue analyses of the reactor coolant pressure boundary components involve time-limited assumptions. In addition, the staff has provided guidance in NUREG–1800, “Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants,” Revision 2, issued December 2010, which recommends that the effects of the reactor water environment on fatigue life be evaluated for a sample of components to provide assurance that cracking due to fatigue will not occur during the period of extended operation. Because the reactor water environment has a significant impact on the fatigue life of components, many license renewal applicants have performed supplemental detailed analyses to demonstrate acceptable fatigue life for these components.

Regulatory Guide 1.28, “Quality Assurance Program Criteria (Design and Construction),” describes methods that the NRC considers acceptable for complying with the requirements in Appendix B to 10 CFR part 50 for establishing and implementing a QA program for the design and construction of nuclear power plants and fuel reprocessing plants.

The regulations at 10 CFR 50.55a specify the ASME Code requirements. In particular, 10 CFR 50.55a(c) requires, in part, that components of the reactor coolant pressure boundary must meet the requirements for Class 1 components in Section III of the ASME Code, with limited exceptions specified in 10 CFR 50.55a(c)(2)(4). Some operating facilities may have performed a supplemental detailed fatigue analysis of components because of new operating conditions identified after the plant began operation.

*Summary of Issue*

The staff has identified concerns about the computer software package, WESTEMS™, that is used to demonstrate the ability of nuclear power plant components to withstand the cyclic loads associated with plant transient operations. This particular computer software package involves the use of computer code developed to calculate fatigue usage during plant transient operations such as startups and shutdowns, as discussed in ASME Code, Section III, Subsection NB, Subarticles NB–3200, “Design By Analysis,” and NB–3600, “Piping Design.”

The staff identified these concerns with the computer software package during the review of the AP1000 design certification application, and they are

described in the staff’s safety evaluation report (Agencywide Documents Access and Management System (ADAMS) Accession No. ML103430502) and its related audit report (ADAMS Accession No. ML110250634). One such concern was that the methodology used by this computer software package to determine the peak stress intensity range time history in fatigue calculations uses the algebraic summation of three orthogonal moment vectors. This algebraic summation methodology is not consistent with ASME Code, Section III, Subsection NB, Subarticle NB–3650, “Analysis of Piping Products,” which states that resultant moments from different load sets shall not be used in calculating the moment range (i.e., this algebraic summation methodology is not an accurate representation of the moment range). Therefore, the use of this practice could provide results that are not accurate. The staff also identified a concern in which, under certain circumstances, the use of this computer software package requires the user to manually modify peak and valley times/stresses during intermediate calculations in the software. Although this method of analyst intervention could provide acceptable results in some cases, reliance on the user’s engineering judgment and ability to modify peak and valley times/stresses, without control and documentation, could produce results that are not predictable, repeatable, or conservative. Because of these concerns, the applicant for the AP1000 design certification elected to remove the use of this computer software package from its design certification document, such that it is not used in the design for the AP1000, as documented in ADAMS Accession No. ML102770329.

License renewal applicants have attempted to use this computer software package to demonstrate acceptable fatigue calculations for plant operation during the period of extended operation. As a result of the concerns described above, the staff asked a license renewal applicant that has used this computer software package to perform an evaluation to demonstrate that the package provides acceptable results and to assess the impact of these identified concerns on the license renewal applicant’s fatigue calculations (ADAMS Accession No. ML102810194). The staff conducted an audit to (1) review this evaluation, (2) address the user’s ability to manually modify peak and valley times/stresses, and (3) address the aforementioned concern

with the algebraic summation of three orthogonal moment vectors.

At the conclusion of the audit, the staff determined, as described in its audit report (ADAMS Accession No. ML110871243), that the license renewal applicant's use of this computer software package demonstrated (1) that it produced calculations of stresses and cumulative usage factors that are consistent with the methodology in ASME Code, Section III, Subsection NB, Subarticle NB-3200, (2) that the analyst's judgment in manually modifying peak and valley times/stresses in these calculations was reasonable and can be appropriately justified and documented, though justification of any user intervention should be documented, (3) that this applicant did not use this software to perform fatigue calculations as described in ASME Code, Section III, Subsection NB, Subarticle NB-3600, and (4) future use of this software should be accompanied by an acceptable demonstration that it performs fatigue calculations in accordance with ASME Code, Section III, Subsection NB, Subarticle NB-3600.

This license renewal applicant performed evaluations on two of its components: A pressurized water reactor (PWR) pressurizer surge nozzle and a PWR safety injection boron injection tank nozzle. When considering the effects of the reactor water environment on fatigue life, these evaluations indicated a cumulative usage factor that was less than the ASME Code design limit of 1.0, provided that there was sufficient and clear records of justification for analyst intervention.

The staff acknowledges that addressees may have used, or will make use of, other computer software packages in performing ASME Code fatigue calculations. Thus, the NRC encourages addressees to review the documents discussed above and to consider actions, as appropriate, to ensure compliance with the requirements for ASME Code fatigue calculations and QA programs, as described in 10 CFR 50.55a and Appendix B to 10 CFR part 50, respectively.

#### *Backfit Discussion*

This RIS informs addressees of potential concerns with the use of computer software packages to perform ASME Code fatigue calculations and reminds them that they should perform these calculations in accordance with ASME Code requirements. The regulations at 10 CFR 50.55a specify the ASME Code requirements. Regulatory

Guide 1.28 describes methods for establishing and implementing a QA program for the design and construction of nuclear power plants. For license renewal, metal fatigue is evaluated as a time-limited aging analysis in accordance with 10 CFR 54.21(c). Section 4.3, "Metal Fatigue," of NUREG-1800 provides the associated staff review guidance. This RIS does not impose a new or different regulatory staff position. It requires no action or written response and, therefore, is not a backfit under 10 CFR 50.109, "Backfitting." Consequently, the NRC staff did not perform a backfit analysis.

#### *Federal Register Notification*

To be done after the public comment period.

#### *Congressional Review Act*

The NRC has determined that this RIS is not a rule as designated by the Congressional Review Act (5 U.S.C. 801-808) and, therefore, is not subject to the Act.

#### *Paperwork Reduction Act Statement*

This RIS does not contain any information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Existing collection requirements under 10 CFR Part 54 were approved by the Office of Management and Budget, control number 3150-0155.

#### *Public Protection Notification*

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

#### *Contact*

Please direct any questions about this matter to the technical contact listed below:

Timothy J. McGinty, Director, Division of Policy and Rulemaking, Office of Nuclear Reactor Regulation.

Laura A. Dudes, Director, Division of Construction Inspection and Operational Programs, Office of New Reactors.

*Technical Contact:* On Yee, NRR, 301-415-1905. *E-mail:* on.yee@nrc.gov.

**Note:** NRC generic communications may be found on the NRC public Web site, <http://www.nrc.gov>, under NRC Library/Document Collections.

#### END OF DRAFT REGULATORY ISSUE SUMMARY

Dated at Rockville, Maryland this 22nd day of September 2011.

For the Nuclear Regulatory Commission.

**Melanie A. Galloway,**

*Acting Director, Division of License Renewal, Office of Nuclear Reactor Regulation.*

[FR Doc. 2011-25242 Filed 9-29-11; 8:45 am]

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## NUCLEAR REGULATORY COMMISSION

[NRC-2011-0217]

### Policy Regarding Submittal of Amendments for Processing of Equivalent Feed at Licensed Uranium Recovery Facilities

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Regulatory issue summary; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is proposing to issue a regulatory issue summary (RIS) to inform addressees of the NRC's policy regarding receipt and processing, without a license amendment, of equivalent feed at an NRC and Agreement State-licensed uranium recovery site, either conventional, heap leach, or in situ recovery.

**DATES:** Submit comments by October 31, 2011. Comments submitted after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except for comments received on or before this date.

**ADDRESSES:** Please include Docket ID NRC-2011-0217 in the subject line of your comments. For additional instructions on submitting comments and instructions on accessing documents related to this action, see "Submitting Comments and Accessing Information" in the **SUPPLEMENTARY INFORMATION** section of this document. You may submit comments by any one of the following methods:

- *Federal Rulemaking Web Site:* Go to <http://www.regulations.gov> and search for documents filed under Docket ID NRC-2011-0217. Address questions about NRC dockets to Carol Gallagher, telephone: 301-492-3668; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

- *Mail comments to:* Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB-05-B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.