

Codes and Standards

1-212-591-8500
FAX 1-212-591-8501
www.asme.org

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ASME International

Three Park Avenue
New York, NY 10016-5990
U.S.A.

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Secretary
U. S. Nuclear Regulatory Commission
Attn: Rulemakings and Adjudications Staff
Mail Stop O-16C1
Washington, DC 20555-0001

OFFICE OF THE SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

Subject: Comments on 10 CFR 50.69 Rulemaking Proposal

Reference: (a) Federal Register 59546, Vol. 66, No. 230, 10 CFR Part 50, *Risk-Informed Treatment of Structures, Systems and Components (SSCs)*, dated November 29, 2001
(b) 10 CFR 50.55a, Codes and Standards

Good Morning:

ASME commends the Commission for moving forward with risk-informed initiatives that will permit focused attention to requirements consistent with their importance to safety. Publication of the proposed 10CFR 50.69 for comment is a positive step in this direction and we are sure that the resulting dialogue with stakeholders will result in an effective and useful process. To assist in this effort, we would like to offer a few observations and comments.

The ASME has had a substantial effort underway for many years to develop risk-informed requirements for nuclear codes and standards, including those referenced by 10 CFR 50.55a. The form of these risk-informed requirements has primarily been Code Cases, including:

- Published Risk-Informed Inservice Inspection and Inservice Testing (ISI and IST) Code Cases;
- Risk-Informed Repair/Replacement Code Cases in the final stages of ASME approval expected to be published in early 2002; and
- Development of risk-informed requirements for pressure testing of SSCs and design of plant piping systems currently under consideration.

The ASME Standard on Probabilistic Risk Assessment for Nuclear Power Plant Applications is in the final stages of approval and is currently planned for publication in late February 2002. Additionally, ASME is looking at risk-informing other nuclear codes and standards documents as appropriate. Attached is Table 1 that provides more details regarding the status of the above

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Code developments that have either been completed or are nearing completion. The table identifies the status of each item regarding ASME approval, NRC endorsement, and the relationship to the proposed 10 CFR 50.69.

In view of the above substantial risk-informing initiatives, ASME offers two specific comments with respect to the subject rulemaking proposal:

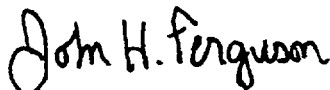
- (1) Paragraph §50.69(d)(2)(ii)(E) Inspection, Test, and Surveillance Process
Since the components being addressed are primarily ASME components, this paragraph should either reference an NRC document listing applicable ASME Code Cases or should directly reference those ASME Code Cases. We offer the following proposed wording:

"Data or information must be obtained to assess the operational readiness of SSCs. The data or information for pumps, valves, and snubbers must allow evaluation of operating characteristics of these RISC-3 SSCs. Use of ASME Risk-Informed Code Cases is an acceptable method for obtaining and analyzing this data and information."

- (2) The parenthetical note between Paragraph 50.69(d)(3)(iii) and (iv)
ASME concurs with the approach of continuing to recognize the acceptability of the risk-informed provisions of ASME Code Cases since that premise has been the assumption for the substantial ASME risk-informed efforts over the past decade.

Should there be questions regarding these comments, please direct them to Mr. G. M. Eisenberg, ASME Director, Nuclear Codes and Standards at above address or by phone at 212-591-8510.

Sincerely Yours,



John H. Ferguson
Vice President, Nuclear Codes & Standards

Cc: Members, ASME Board on Nuclear Codes and Standards
Members BNCS TG on Risk-Informed Part 50

TABLE 1
ASME RISK-INFORMED CODES AND STANDARDS
RELATED TO RISK-INFORMING 10 CFR PART 50
OPTION 2 - RISK-INFORMING SPECIAL TREATMENT REQUIREMENTS

ASME SECTION XI - INSERVICE INSPECTION (ISI) AND REPAIR/REPLACEMENT OF PRESSURE-RETAINING ITEMS					
Document No.	Title	Explanation	ASME Status	NRC Endorsement Status	Reference in 10 CFR 50.69
Code Cases					
N-577-1 (Revision 1)	Risk-Informed Requirements for Class 1, 2, or 3 piping, Method A	Process to place piping segments into HSS and LSS categories; Defines appropriate ISI requirements (sample sizes, frequency & exam methods)	Approved	Could be endorsed in RG 1.147 in near future (NRC endorsed WOG Topical Report in interim)	If not already endorsed in RG 1.147, 10 CFR 50.69 could reference EPRI and WOG Topical Reports in interim
N-578-1 (Revision 1)	Risk-Informed Requirements for Class 1, 2, or 3 piping, Method B	Process to place piping segments into High, Medium, Low categories; Defines appropriate ISI requirements (sample sizes, frequency & exam methods)	Approved	Could be endorsed in RG 1.147 in near future (NRC endorsed EPRI Topical Report in interim)	If not already endorsed in RG 1.147, 10 CFR 50.69 could reference EPRI and WOG Topical Reports in interim
N-658	Risk-Informed Safety Classification for Use in Risk-Informed Repair/Replacement Activities	Process to determine classification of pressure-retaining items into HSS and LSS categories for repair/replacement activities	To be issued for Letter Ballot to Boiler & Pressure Vessel Stds Committee; Expect Approval in Early 2002	Could be endorsed in RG 1.147	Could be endorsed in 10 CFR 50.69
N-XXX	Alternative Repair/Replacement Requirements for Items Classified in Accordance With Risk-Informed Processes	Defines appropriate treatment requirements for repair/replacement of pressure-retaining items categorized per Code Case N-658	To be issued for Letter Ballot to Boiler & Pressure Vessel Stds Committee; Expect Approval in Early 2002	Could be endorsed in RG 1.147	Could be endorsed in 10 CFR 50.69
Proposed ASME Code Section XI Addition					
Appendix X – ASME Section XI	Risk-Informed Requirements For Piping	Non-mandatory appendix to Section XI to incorporate lessons learned from use of Code Cases N-577 and N-578	Being Developed Within ASME XI Working Group on Implementation of Risk-Based Examination	Would be endorsed in 10 CFR 50.55a(g) after 2002	Not available at this time

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ASME OPERATIONS & MAINTENANCE COMMITTEE - INSERVICE TESTING OF PUMPS, VALVES, AND MECHANICAL EQUIPMENT					
Document No.	Title	Explanation	ASME Status	NRC Endorsement Status	Reference in 10 CFR 50.69
Code Cases					
OMN-3 Revision 1	Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants	Process to place pumps and valves into HSS and LSS categories; To be used in conjunction with Code Cases OMN-4, 7, 11, and 12	Approved	In DG-1089; To be issued for comment; Finalize late 2002	10 CFR 50.69 could reference, as needed
OMN-4	Requirements for Applying Risk Insights for Inservice Testing of Check Valves of LWR Power Plants	Defines appropriate IST requirements (frequency & test methods) for check valves categorized per Code Case OMN-3	Approved	In DG-1089; To be issued for comment; Finalize late 2002	10 CFR 50.69 could reference, as needed
OMN-7	Requirements for Applying Risk Insights for Inservice Testing of Pumps of LWR Power Plants	Defines appropriate IST requirements (frequency & test methods) for pumps categorized per Code Case OMN-3	Approved	In DG-1089; To be issued for comment; Finalize late 2002	10 CFR 50.69 could reference, as needed
OMN-10	Requirements for Safety Significance Categorization of Snubbers Using Risk Insights and Testing Strategies for Inservice Testing of LWR Power Plants	Process to place snubbers into HSS and LSS categories; Defines appropriate IST requirements (frequency & test methods) for snubbers	Approved	Not in DG-1089; Would only be endorsed after 2002	To be defined
OMN-11	Risk-Informed Inservice Testing of Motor-Operated Valves	Defines appropriate IST requirements (frequency & test methods) for motor-operated valves categorized per Code Case OMN-3 and in conjunction with Code Case OMN-1	Approved	In DG-1089; To be issued for comment; Finalize late 2002	10 CFR 50.69 could reference, as needed
OMN-12	Alternate Requirements for Inservice Testing Using Risk Insights for Pneumatically and Hydraulically Operated Valve Assemblies in LWR Power Plants	Defines appropriate IST requirements (frequency & test methods) for pneumatically- and hydraulically-operated valve assemblies categorized per Code Case OMN-3	Approved	In DG-1089; To be issued for comment; Finalize late 2002	10 CFR 50.69 could reference, as needed
Proposed ASME OM Code Addition					
Section ISTE	Risk-Informed Inservice Testing of Components of LWR Power Plants	New section to ASME OM Code to incorporate lessons learned from use of Code Cases OMN-3, 4, 7, 10, 11, and 12	Being developed by O&M Committee	Would be endorsed in 10 CFR 50.55a(f) after 2002	Not available at this time

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OPTION 2 - RISK-INFORMING SPECIAL TREATMENT REQUIREMENTS

ASME COMMITTEE ON NUCLEAR RISK MANAGEMENT - PRA STANDARD					
Document No.	Title	Explanation	ASME Status	NRC Endorsement Status	Reference in 10 CFR 50.69
Proposed Standard					
Rev 14A	Standard For Probabilistic Risk Assessment For Nuclear Power Plant Applications	Sets forth requirements for probabilistic risk assessments (PRAs) used to support risk-informed decisions for commercial nuclear power plants, and prescribes a method for applying these requirements for specific applications. Standard applies to PRAs used to support applications of risk-informed decision-making related to design, licensing, procurement, construction, operation, and maintenance. Standard establishes requirements for a Level 1 analysis of internal events while at power. In addition, this Standard establishes requirements for a limited large, early release frequency (LERF) analysis sufficient to evaluate the LERF for internal events while at power.	Approved by Committee on Nuclear Risk Management; Additional comments from NRC received during public review period have been addressed; Expect to be issued in early 2002	To be defined	To be defined