

UNITED STATES NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, DC 20555 - 0001

June 18, 2012

Mr. R.W. Borchardt Executive Director for Operations U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

SUBJECT: PROPOSED REVISION 1 TO REGULATORY GUIDE 1.192, "OPERATION AND MAINTENANCE CODE CASE ACCEPTABILITY, ASME OM CODE"

Dear Mr. Borchardt:

During the 595th meeting of the Advisory Committee on Reactor Safeguards, June 6-8, 2012, we reviewed Proposed Revision 1 to Regulatory Guide 1.192 (DG-1232), "Operation and Maintenance Code Case Acceptability, ASME OM Code." During this meeting, we had the benefit of discussions with representatives of the NRC staff. We also had the benefit of the documents referenced.

RECOMMENDATION

Proposed Revision 1 to Regulatory Guide 1.192 should be issued for public comment after the conditions for acceptability of Code Case OMN-3 are revised to include reference to Regulatory Guide 1.200 and to add a condition that the risk categorization be reviewed when the probabilistic risk assessment (PRA) is updated.

BACKGROUND

The American Society of Mechanical Engineers (ASME) Code is incorporated by reference into 10 CFR 50.55a. In 1990, ASME published the initial edition of the "Code for Operation and Maintenance of Nuclear Power Plants (OM Code)" that provides rules for inservice testing and examination of pumps, valves, and dynamic restraints. 10 CFR 50.55a(f), "Inservice Testing Requirements," requires, in part, that Class 1, 2, and 3 components and their supports meet the requirements of the OM Code or equivalent quality standards.

The latest editions and addenda of the OM Code that have been approved for use by the NRC are referenced in 10 CFR 50.55a(b). The ASME also periodically publishes OM Code Cases, which provide alternatives developed and approved by ASME or explain the intent of existing Code requirements. Regulatory Guide 1.192 identifies the Code Cases that have been determined by the NRC to be acceptable alternatives to applicable parts of the OM Code. The NRC will amend 10 CFR 50.55a to incorporate Regulatory Guide 1.192 by reference. Because of continuing change in the status of Code Cases, the staff plans periodic updates to 10 CFR 50.55a and Regulatory Guide 1.192 to accommodate new Code Cases and revisions of existing Code Cases.

DISCUSSION

Our review of Regulatory Guide 1.192 focused on the review of Code Cases OMN-1, Revision 1, and OMN-3 and the staff's conditions for the use of these Code Cases. OMN-1 establishes the requirements for pre-service and inservice testing to assess the operational readiness of active motor-operated valves (MOVs) in light water reactor power plants. OMN-1 permits a performance-based determination of the test intervals for MOVs. Extension of such test intervals usually implicitly assumes a relatively constant rate of degradation. However, it is possible that extension of the test intervals could introduce new forms of degradation. Together with the conditions that the staff has included in the Regulatory Guide and the current practice guided by the Statement of Considerations to 10 CFR 50.55a, operating experience provides reasonable assurance that new modes of failure are not likely to develop and that test programs are structured to detect new modes in a timely fashion if they do occur.

OMN-1, Revision 1 also permits risk-informed MOV inservice testing that incorporates risk insights in conjunction with performance margin to establish MOV grouping, acceptance criteria, exercising requirements, and testing intervals to be implemented. OMN-3 establishes the component safety categorization methodology. The conditions on OMN-3 that the staff has imposed in Regulatory Guide 1.192 are reasonable. However, they should be revised to include reference to Regulatory Guide 1.200 to help ensure that PRAs used to determine safety significance of components are of appropriate quality. To account for potential changes in failure rates and other changes in the PRA, Regulatory Guide 1.192 should include a condition that the risk categorization be reviewed when the PRA is updated.

Proposed revision 1 to Regulatory Guide 1.192 should be issued for public comment after the conditions for acceptability of Code Case OMN-3 are revised.

Sincerely,

/RA/

J. Sam Armijo Chairman

REFERENCE

- Draft Regulatory Guide DG-1232, (Proposed Revision 1 to Regulatory Guide 1.192) "Operation and Maintenance Code Case Acceptability, ASME OM Code," November 2011 (ML091470444)
- Regulatory Guide 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," March 2009 (ML090410014)

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Letter to R.W. Borchardt, Executive Director for Operations, from J. Sam Armijo, ACRS Chairman dated June 12, 2012

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