



U.S. NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

**Thirteenth ASME/NRC
Pump and Valve Symposium
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Agenda

- Communication Between ASME and NRC
- NRC Participation in OM Code
- Risk-Informed Inservice Testing
- Rulemaking
- Changes at the NRC
- Recent Operating Experience



Communication Between ASME and NRC



Regular Interactions

- ASME/NRC biannual phone call
- NRC staff on the OM Executive Committee, the Standards Committee, and Subcommittees
- NRC staff participate in the Inservice Testing Owners Group meetings, Snubber User Group meetings, and other Owners Group meetings
- NRC staff member on BNCS



Enhanced Collaboration

- NRC held a public meeting to discuss the public comments and NRC responses on the 2009-2012 OM Code rulemaking
 - NRC plans to repeat these meetings on future OM Code rulemakings
- NRC staff worked with OM committee members to develop Code Case OMN-20, “Inservice Test Frequency” to allow grace periods for inservice testing



NRC Participation in OM Code



NRC Staff Roles and Responsibilities

- MD 6.5, NRC Participation in the Development and Use of Consensus Standards
- Created Standards Development Organization Coordinator role
- Clarified roles and responsibilities for NRC staff



Internal Coordination

- Prior to voting on an OM Code ballot, NRC staff caucus and come to an agreement on how to vote.
- NRC Regional Office staff and Resident Inspectors regularly discuss OM Code issues with the Headquarters staff.



Coordination with OM Code

- Where a Code Case is inconsistent with the NRC regulatory position, conditions are imposed
- One objective is to minimize the need for imposing conditions
- NRC will make the regulatory position known as early in the process as possible



Risk-Informed Inservice Testing

Incorporating Risk Insights

- As an agency, the NRC is focused on integrating risk insights into decision making
- There have been successes in applying risk-informed insights to licensing actions

Risk-Informed Inservice Testing

- NRC staff has worked with OM Code Committee members to develop risk-informed code cases for testing of pumps, valves, and snubbers.
- Development of Subsection ISTE, “Risk-Informed Inservice Testing of Components in Light-Water Reactor Nuclear Power Plants.”



Rulemaking



Rulemaking

- Final Rule for 2009-2012 Editions of OM Code will be published on July 18, 2017
- Final Rule for ASME Section III, XI, and OM Code Cases expected to be published in third quarter of 2017.
- Preliminary Rule for 2015-2017 Editions of OM Code scheduled to be published for public comment at the end of 2018.

Why does it take so long?

- From the time the working group completes their evaluation, the following steps must take place:
 - Regulations Specialist Review
 - Technical Editor Review
 - Rulemaking Branch Chief Review
 - Rulemaking SES Review



Why does it take so long?

- Interoffice Concurrence (NRR/DE, RES/DE, NRO/DE, ADM, OCIO)
- OGC Review (Part 1 and Part 2)
- OFR Approval to Incorporate by Reference
- NRR Front Office Review and Final Signature
- Publish



Common Causes of Delay

- Changes in scope late in the process
- Significant edits that have ripple effects
- Changes in government policy
- Staff work priorities



Changes at the NRC



Changes at NRC

- Project Aim 2020
- Declining Agency budgets
- NRC participation in OM Code activities is not affected



NRC Initiatives

- NRR Restructuring
 - Materials (ISI) moves to the Division of Materials and License Renewal in October 2017
 - OM Code responsibility remains in the Division of Engineering
- NRO to merge with NRR by 2020



Process Improvements

- Changes in NRR licensing processes
 - Acceptance Review timeliness
 - Provide estimated level of effort
 - Monitor progress in greater detail
 - Manage staff workload



Recent Operating Experience

LaSalle Anchor Darling Double Disk Gate Valve Failure

LaSalle Anchor Darling Double Disk Gate Valve Stem/Disc Separation

- In February 2017, during a refueling outage, a High Pressure Core Spray (HPCS) motor-operated valve failed to open
- Stem disc separated due to failure of wedge pin and shearing of the stem/wedge threads

Flowserve Part 21 Notice (2013)

- Flowserve issued a Part 21 for valves of this model that have a stem/wedge threaded assembly
- BWROG developed guidance document to address the Flowserve Part 21.



NRC Public Meeting

- NEI, Exelon, BWROG, PWROG, EPRI, Flowserve, INPO, Licensees and Subject Matter Expert consultants attended
- NEI stated industry wide valve assessment survey is in process with the results to be presented to NRC



NRC Public Meeting

- The BWROG stated that the guidance document is being revised
 - Target completion is August 2017
 - How to determine susceptibility
 - Schedule for proposed repairs



Ongoing Evaluation

- NRC staff is evaluating regulatory framework for resolving the issue
- Information Notice 2017-03 was issued June 15, 2017
- NRC staff is monitoring industry activities to address the issue



Ongoing Evaluation

- NRC interest in ASME OM Code assessment of the effectiveness of ongoing diagnostic testing and potential methods for improvement
 - Opportunity for further engagement between NRC and OM Code



QUESTIONS?