

**Bases for withdrawal of Regulatory Guide 1.37,  
“Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of  
Water-Cooled Nuclear Power Plants”**

**(1) What regulation(s) did the Regulatory Guide support?**

RG 1.37 provides guidance on meeting the requirements of Appendix B, “Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants,” 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities.

**(2) What was the purpose of the Regulatory Guide?**

RG 1.37 provided guidance to licensees and their vendors on cleaning and cleanliness controls of fluid systems and associated components for nuclear power plants during manufacturing, construction, repairs, and modifications.

**(3) How was the Regulatory Guide used?**

RG 1.37 was used to assist licensees and their vendors in meeting the requirements in Appendix B to 10 CFR Part 50, in regards to quality assurance requirements for cleaning of fluid systems and associated components. Regulatory Guide (RG) 1.37 was initially published in March 1973 and revised in March 2007. The initial issuance of RG 1.37 endorsed American National Standards Institute Standard N45.2.1-1973, “Cleaning of Fluid Systems and Associated Components during Construction Phase of Nuclear Power Plants” with six regulatory positions. RG 1.37, Revision 1, endorsed American Society of Mechanical Engineers NQA-1-1994, Part II, Subpart 2.1, “Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components for Nuclear Power Plants,” with three regulatory positions. The staff issued RG 1.37, which endorsed an industry consensus standard, to provide licensees with a method acceptable to the NRC staff to meet quality assurance requirements.

**(4) Why is the Regulatory Guide no longer needed?**

The NRC issued RG 1.28, “Quality Assurance Program Criteria (Design and Construction),” Revision 4 in June 2010, which endorses NQA-1-2008 and the NQA-1a-2009 Addenda, Parts I and II. NQA-1-2008 and NQA-1a-2009 Addenda Part II incorporate the requirements and regulatory positions contained in RG 1.37, Revision 1. Additionally, RG 1.33, “Quality Assurance Program Requirements (Operation),” was issued in June 2013, which endorses ANSI/ANS 3.2-2012. ANSI/ANS 3.2-2012, Section 1.2, “Purpose,” requires implementation of the applicable sections of NQA-1-2008 and NQA-1a-2009 during the operational phase of power plant operation. Any update to RG 1.37 to endorse NQA-1-2008 and NQA-1a-2009, Part II, Subpart 2.1 would be redundant since the standards are already endorsed in RG 1.28, Revision 4 and in RG 1.33 Revision 3.

Regulatory Guide 1.37 endorsed ASME NQA-1-1994 with 3 regulatory positions. The regulatory positions are no longer need for the following reasons:

- Position 1, “Referenced Documents,” is no longer required because the paragraph has been deleted in ASME NQA-1-2009 and subsequent revisions.
- The requirements of Position 2, “Water quality,” are included in Section 304.1 of ASME NQA-1-2009 and subsequent revisions.
- The requirements of Position 3, “Precautions,” are included in Section 304.1 of ASME NQA-1-2009 and subsequent revisions.

**(5) What guidance is available once the Regulatory Guide is withdrawn?**

The NRC staff's regulatory guidance for quality assurance requirements for cleaning of fluid systems and associated components can be found in RG 1.28, Revision 4, "Quality Assurance Program Criteria (Design and Construction)," which endorsed NQA-1-2008 and NQA-1a-2009 Addenda, Parts I and II. Additionally, RG 1.33, "Quality Assurance Program Requirements (Operation)," endorses ANSI/ANS 3.2-2012. ANSI/ANS 3.2-2012, Section 1.2, "Purpose," requires implementation of the applicable sections of NQA-1-2008 and NQA-1a-2009 during the operational phase of power plant operation.

**(6) Is the Regulatory Guide referenced in other documents and what are the "ripple effects" on these documents if it is withdrawn?**

RG 1.37 is briefly discussed or referenced in the following sections of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition":

- 5.2.3, "Reactor Coolant Pressure Boundary Materials,"
- 5.3.1, "Reactor Vessel Materials,"
- 5.4.2.1, "Steam Generator Materials,"
- 6.1.1, "Engineered Safety Features Materials,"
- 10.3.6, "Steam and Feedwater System Materials,"
- 14.2, "Initial Plant Test Program – Design Certification and New License Applicants," and
- 17.5, "Quality Assurance Program Description – Design Certification, Early Site Permit and New License Applicants."

RG 1.37 is briefly discussed or referenced in the following inspection procedures (IPs):

- IMC 1245, Appendix C2, "Reactor Engineering Inspector Technical Proficiency Training and Qualification Journal"
- IP 49051, "Reactor Coolant Pressure Boundary Piping QA Review"
- IP 49053, "Reactor Coolant Pressure Boundary Piping - Work Observation"
- IP 49061, "Safety-Related Piping - QA Review"
- IP 49063, "Piping - Work Observation"

There are no ripple effects of withdrawing this RG. The impact of not revising the above documents at this time will be minimal because applications referencing this RG will be limited. The industry is mature and fluid cleaning practices/procedures for most utilities are well established. Any user who desires to use RG 1.37 directly or indirectly (via a related reference) will ascertain that it has been withdrawn and the linked bases for withdrawal will direct the user to RG 1.28, Revision 4 and RG 1.33, Revision 3. The staff intends to update references in NUREG-0800 and inspection procedures to RG 1.28, Revision 4 during the next updates to these documents.

**(7) What is the basis for believing that no guidance similar to that in the Regulatory Guide will ever be needed?**

The guidance remains valid and has been incorporated into RG 1.28 and RG 1.33. Any updates to this guidance would be evaluated as needed, particularly any changes to NQA-1, Parts I and II that warrant limitations or conditions.

**(8) Will generic guidance still be needed?**

Guidance for complying with quality assurance criteria for cleaning of fluid systems and associated components is still needed. The staff has endorsed updated guidance in Revision 4 of RG 1.28. Updated

guidance for cleanliness of fluid systems is ensured through the continued staff participation on consensus standards.

**(9) What is the rationale for withdrawing this Regulatory Guide instead of revising it?**

RG 1.37 contains the endorsement of outdated guidance. Updated guidance has been endorsed in Revision 4 of RG 1.28, which was issued in June 2010.

**(10) Do other agencies rely upon the Regulatory Guide, e.g., the Agreement States, National Aeronautical and Space Administration, Department of Energy?**

The staff is unaware of any other agency that uses or relies on the guidance in RG 1.37.