

NUCLEAR REGULATORY COMMISSION

[NRC-2015-0229]

Design of Structures, Components, Equipment, and Systems

AGENCY: Nuclear Regulatory Commission.

ACTION: Standard review plan-final section revision; issuance

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing a final revision to sections in Chapter 3, "Design of Structures, Components, Equipment, and Systems Reactor Coolant System and Connected Systems" of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition." The changes to these Standard Review Plan (SRP) sections reflect responses to public comments and additional guidance based on current NRC staff review methods and practices based on lessons learned from the NRC's reviews of design certification and combined license applications completed since the last revision of this chapter.

DATES: The effective date of this Standard Review Plan (SRP) update is April 12, 2017

ADDRESSES: Please refer to Docket ID NRC-2015-0229 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available

information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0229. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individuals listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. For the convenience of the reader, the ADAMS accession numbers are provided in a table in the "Availability of Documents" section of this document.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Mark Notich, Office of New Reactors, telephone: 301-415-3053; e-mail: Mark.Notich@nrc.gov; U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

I. Background

On September 29, 2015 (80 FR 58512), the NRC published for public comment the proposed revisions to these sections of the SRP. The staff made changes to the proposed revisions after consideration of comments received from one (1) commenter. A summary of the comments and the staff's disposition of the comments is available in a separate document, "Response to Public Comments on Draft Standard Review Plan Section from Chapter 3: Design of Structures, Components, Equipment, and Systems" (ADAMS Accession No. ML16133A361). The additional guidance for staff reviews includes the following:

- Analytical procedures for piping systems
- Torsional effects of eccentric masses
- Seismic Category I Buried Piping systems
- Interaction of other piping with seismic Category I piping
- Additional discussion on Rayleigh damping
- Comprehensive forcing function lists for all reactor internals
- Scale Model Testing (SMT) results and demonstration of model adequacy

These sections have been developed to assist the NRC staff review the design of structures, components, equipment, and systems under parts 50 and 52 of title 10 of the *Code of Federal Regulations* (10 CFR). The revisions to these SRP sections reflect no changes in staff position; rather they clarify the original intent of these SRP sections using plain language throughout in accordance with the NRC's Plain Writing Action Plan. Additionally, these revisions reflect operating experience, lessons learned, and updated guidance since the last revision, and address the applicability of regulatory treatment of non-safety systems where appropriate. Details of specific changes in the proposed revisions are included at the end of each of the proposed sections.

Following the NRC staff's evaluation of public comments, the NRC intends to finalize the proposed revisions of the subject SRP Sections in ADAMS and post them on the NRC's public Web site at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0800/>.

II. Backfitting and Finality Provisions

Issuance of these revised SRP sections does not constitute backfitting as defined in § 50.109 of title 10 of the *Code of Federal Regulations* (10 CFR), "Backfitting," (the Backfit Rule) or otherwise be inconsistent with the issue finality provisions in 10 CFR part 52. The NRC's position is based upon the following considerations.

1. *The SRP positions do not constitute backfitting, inasmuch as the SRP is internal guidance directed at the NRC staff with respect to their regulatory responsibilities.*

The SRP provides guidance to the staff on how to review an application for the NRC's regulatory approval in the form of licensing. Changes in internal staff guidance are not matters for which either nuclear power plant applicants or licensees are protected under either the Backfit Rule or the issue finality provisions of 10 CFR part 52.

2. *The NRC staff has no intention to impose the SRP positions on current licensees and regulatory approvals either now or in the future.*

The staff does not intend to impose or apply the positions described in the SRP to existing (already issued) licenses and regulatory approvals. Therefore, the issuance of a final SRP – even if considered guidance that is within the purview of the issue finality provisions in 10 CFR part 52 – need not be evaluated as if it were a backfit or as being inconsistent with issue finality provisions. If, in the future, the staff seeks to impose a position in the SRP on holders of already issued licenses in a manner which does not provide issue finality as described in the

applicable issue finality provision, then the staff must make the showing as set forth in the Backfit Rule or address the criteria for avoiding issue finality as described in the applicable issue finality provision.

3. *Backfitting and issue finality do not – with limited exceptions not applicable here –protect current or future applicants.*

Applicants and potential applicants are not, with certain exceptions, protected by either the Backfit Rule or any issue finality provisions under 10 CFR part 52. This is because neither the Backfit Rule nor the issue finality provisions under 10 CFR part 52 – with certain exclusions discussed in the next paragraph– were intended to apply to every NRC action which substantially changes the expectations of current and future applicants.

The exceptions to the general principle are applicable whenever an applicant references a 10 CFR part 52 license (e.g., an early site permit) and/or NRC regulatory approval (e.g., a design certification rule) with specified issue finality provisions. The staff does not, at this time, intend to impose the positions represented in the SRP in a manner that is inconsistent with any issue finality provisions. If, in the future, the staff seeks to impose a position in the SRP in a manner which does not provide issue finality as described in the applicable issue finality provision, then the staff must address the criteria for avoiding issue finality as described in the applicable issue finality provision.

III. Congressional Review Act.

This action is a rule as defined in the Congressional Review Act (5 U.S.C. §§ 801-808). However, the Office of Management and Budget has not found it to be a major rule as defined in the Congressional Review Act.

IV. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

Document	ADAMS Accession Number
Section 3.9.2, "Dynamic Testing and Analysis of Systems, Structures, and Components"	ML16133A418
Section 3.9.4, "Control Rod Drive Systems"	ML16133A472
Section 3.9.5, "Reactor Pressure Vessel Internals"	ML16134A059
Section 3.9.6, "Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints"	ML16134A116

* No changes resulting from public comments. See documents in the package at ADAMS Accession Number ML16133A148 to see changes made since last revision.

Dated at Rockville, Maryland, this 7th day of March, 2017.

For the Nuclear Regulatory Commission.

/RA/

Joseph Colaccino, Chief
New Reactor Rulemaking and Guidance Branch
Division of Engineering, Infrastructure and Advanced Reactors
Office of New Reactors

NUCLEAR REGULATORY COMMISSION

[NRC-2015-0229]

SUBJECT: DESIGN OF STRUCTURES, COMPONENTS, EQUIPMENT, AND SYSTEMS

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ADAMS Accession Number: ML16133A355

***via e-mail**

ADM-014

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