

NUCLEAR REGULATORY COMMISSION

[NRC-2015-0198]

**Design of Structures, Components, Equipment, and Systems,
and Reactor Coolant System and Connected Systems Guidance**

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 several sections in Chapter 3, "Design of Structures, Components, Equipment, and Systems Reactor Coolant System and Connected Systems," and Chapter 5, "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 revisions to these standard review plan (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 the inclusion of updated guidance since the last revision, and address the applicability of regulatory treatment of non-safety systems where appropriate. The staff also deleted text in one of the Chapter 5 SRPs, as the text contained guidance that was included in other SRPs and, therefore, does not constitute removal of guidance and added several references to updated standards and guidance.

DATES: The effective date of this Standard Review Plan (SRP) update is January 23, 2017.

ADDRESSES: Please refer to Docket ID NRC-2015-0198 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-2015-0198. 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; or Nishka Devaser, Office of New Reactors, telephone: 301-415-5196; e-mail: Nishka.Devaser@nrc.gov; both staff at U.S. Nuclear

Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

I. Background

A summary of the comments and the NRC staff's disposition of the comments are available in a separate document, "Response to Public Comments on Draft Standard Review Plan Sections from Chapters 3 and 5: Design of Structures, Components, Equipment, and Systems, and Reactor Coolant System and Connected Systems" (ADAMS Accession No. ML16088A345).

The Office of New Reactors and the Office of Nuclear Reactor Regulation are revising these sections from their current revisions. Details of specific changes in the proposed revisions are included at the end of each of the proposed sections.

The changes to these SRP sections reflect 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.

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 ADAMS accession numbers revised sections are available in ADAMS under the accession numbers in the table below.

Document	ADAMS Accession Number*
Section 3.6.2, "Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping," Revision 3	ML16088A041
Section 3.9.1, "Special Topics for Mechanical Components," Revision 4	ML16088A068

Section 3.10, "Seismic and Dynamic Qualification of Mechanical and Electrical Equipment," Revision 4	ML16088A101
Section 5.2.1.1, "Compliance with the Codes and Standards Rule, 10 CFR 50.55a," Revision 4	ML16088A127
Section 5.2.1.2 , "Applicable Code Cases," Revision 4	ML16088A219
Branch Technical Position 3-4, ""Postulated Rupture Locations in Fluid System Piping Inside and Outside Containment," Revision 3	ML16085A315

** See documents in the package at ADAMS Accession Number ML16083A387 to see changes made since last revision.*

Dated at Rockville, Maryland, this 19th day of December, 2016.

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.

Section 3.10, "Seismic and Dynamic Qualification of Mechanical and Electrical Equipment," Revision 4	ML16088A101
Section 5.2.1.1, "Compliance with the Codes and Standards Rule, 10 CFR 50.55a," Revision 4	ML16088A127
Section 5.2.1.2, "Applicable Code Cases," Revision 4	ML16088A219
Branch Technical Position 3-4, "Postulated Rupture Locations in Fluid System Piping Inside and Outside Containment," Revision 3	ML16085A315

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Office of New Reactors

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ADAMS Accession Number: ML16085A218

***via e-mail**

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**SUBJECT: DESIGN OF STRUCTURES, COMPONENTS, EQUIPMENT, AND SYSTEMS,
AND REACTOR COOLANT SYSTEM AND CONNECTED SYSTEMS**

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