

NUCLEAR REGULATORY COMMISSION
[NRC-2016-0108]

“Changes to Aging Management Guidance for Various Steam Generator Components”

AGENCY: Nuclear Regulatory Commission.

ACTION: Interim staff guidance; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing the final License Renewal Interim Staff Guidance (LR-ISG), LR-ISG-2016-01, “Changes to Aging Management Guidance for Various Steam Generator Components.” This LR-ISG describes changes to aging management program (AMP) XI.M19, “Steam Generators,” and aging management review (AMR) items for steam generator components in NUREG-1801, “Generic Aging Lessons Learned (GALL) Report,” Revision 2, and NUREG-1800, “Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants” (SRP-LR), Revision 2.

DATES: This guidance is effective on January 6, 2017.

ADDRESSES: Please refer to Docket ID NRC-2016-0108 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-2016-0108**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual 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. The ADAMS accession number for each

document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in 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: Seung Min, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-2045; e-mail: Seung.Min@nrc.gov.

SUPPLEMENTARY INFORMATION

I. Background

The NRC issues LR-ISGs to communicate insights and lessons learned and to address emergent issues not covered in existing license renewal guidance documents such as the GALL Report, NUREG-1801, Revision 2 (December 2010); and the SRP-LR, NUREG-1800, Revision 2 (December 2010), which are available in ADAMS under Accession Nos. ML103490041 and ML103490036, respectively. The NRC staff and stakeholders may use the guidance in an LR-ISG document before it is incorporated into a license renewal guidance document revision. The NRC staff issues LR-ISGs in accordance with the LR-ISG Process, Revision 2 (ADAMS Accession No. ML100920158), for which a notice of availability was published in the *Federal Register* on June 22, 2010 (75 FR 35510).

The NRC staff has developed LR-ISG-2016-01 (ADAMS Accession No. ML16237A383) to describe changes to the aging management guidance for various steam generator components within the scope of part 54 of title 10 of the *Code of Federal Regulations* (10 CFR), "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." Specifically, this LR-ISG addresses the changes to aging management guidance for managing: a) cracking due to primary water stress corrosion cracking in divider plate assemblies and tube-to-tubesheet welds, and b) loss of material due to boric acid corrosion in steam generator heads (interior surfaces) and tubesheets (primary side). In addition, changes are made to the associated AMR items in the GALL Report and SRP-LR. This LR-ISG also revises the Final Safety Analysis

Report supplement for GALL Report AMP XI.M19, “Steam Generators” that is documented in Table 3.0-1, “FSAR Supplement for Aging Management of Applicable Systems” of the SRP-LR.

On June 7, 2016, (81 FR 36612) the NRC requested public comments on draft LR-ISG-2016-01 (ADAMS Accession No. ML16102A268). The NRC received comments from the Nuclear Energy Institute by letter dated July 7, 2016 (ADAMS Accession No. ML16194A026). No other comments were submitted. The NRC considered those comments in developing the final LR-ISG. Detailed responses to the comments can be found in Appendix C of the final LR-ISG.

The final LR-ISG-2016-01 is approved for NRC staff and stakeholder use and will be incorporated into the next revision of the NRC’s license renewal guidance document. These changes provide one acceptable approach for managing the associated aging effects for steam generator components within the scope of the license renewal rule (10 CFR part 54). A licensee may cite LR-ISG-2016-01 in its license renewal application until the guidance in this LR-ISG is incorporated into the license renewal guidance documents (i.e., GALL Report and SRP-LR).

The staff also plans to consider the information in this LR-ISG and make corresponding changes when finalizing the aging management guidance for the subsequent license renewal period (i.e., up to 80 years of operation), which is documented in draft NUREG-2191, draft “Generic Aging Lessons Learned for Subsequent License Renewal Report” (GALL-SLR) (ADAMS Accession Nos. ML15348A111 and ML15348A153), and draft NUREG-2192, draft “Standard Review Plan for Review of Subsequent License Renewal for Nuclear Power Plants” (SRP-SLR) (ADAMS Accession No. ML15348A265).

II. Congressional Review Act

This LR-ISG 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.

III. Backfitting

The NRC intends to use the guidance in this LR-ISG when reviewing current and future license renewal applications. Issuance of this final LR-ISG does not constitute backfitting as defined in 10 CFR 50.109 (the Backfit Rule). As discussed in the “Backfitting” section of the final LR-ISG-2016-01, the backfitting provisions in 10 CFR 50.109 are not applicable to an applicant for a renewed license. Therefore, issuance of this LR ISG would not constitute backfitting for licensees currently in the license renewal process as defined in 10 CFR 50.109(a)(1). This guidance is nonbinding and the LR-ISG does not require current holders of renewed licenses to take any action (i.e., programmatic or plant hardware changes for managing the associated aging effects for components within the scope of this LR-ISG). The current holders of renewed licenses could treat the information presented in this LR-ISG as “operating experience” information and consider this information to ensure that relevant AMPs are, and will remain, effective. However, the NRC could also use the LR-ISG in evaluating voluntary, licensee-initiated changes to previously approved AMPs.

Dated at Rockville, Maryland, this 30th day of November, 2016.

/RA/

For the Nuclear Regulatory Commission.

Benjamin G. Beasley,

Acting Deputy Director, Division of License Renewal,
Office of Nuclear Reactor Regulation.