

## **DRAFT LICENSE RENEWAL INTERIM STAFF GUIDANCE LR-ISG-2011-02: AGING MANAGEMENT PROGRAM FOR STEAM GENERATORS**

### **INTRODUCTION**

Many of the line items in Chapter IV.D1 and IV.D2 of NUREG-1801, Revision 2, "Generic Aging Lessons Learned (GALL) Report," reference the steam generator aging management program, which is described in Chapter XI.M19, "Steam Generators."

The steam generator aging management program primarily references Nuclear Energy Institute (NEI) 97-06, Revision 2, "Steam Generator Program Guidelines" and various Electric Power Research Institute (EPRI) guidelines for managing aging associated with steam generators.

In addition, Table 3.0-1 of NUREG-1800, Revision 2, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants" also references Revision 2 of NEI 97-06 (refer to reference 3 on page 3.1-16).

Since Revision 2 of NUREG-1800 and NUREG-1801 were issued, Revision 3 of NEI 97-06 was issued. This interim staff guidance evaluates the suitability of using Revision 3 of NEI 97-06 to manage steam generator aging. In addition, this interim staff guidance corrects an incorrect revision in NUREG-1801, Revision 2, to the Steam Generator Integrity Assessment Guidelines.

### **DISCUSSION**

NEI 97-06, Revision 2 was issued in September 2005. Since that time, all licensees have adopted new steam generator technical specification requirements. NEI 97-06, Revision 3 was provided to the NRC on May 6, 2011 (ML111310712). The changes made in Revision 3 of NEI 97-06 included:

- removing "requirements" in NEI 97-06 which are located in other industry documents (e.g., the EPRI guidelines which NEI 97-06 references);

- correcting inconsistencies with the technical specification requirements; and

- correcting definitions.

The changes made in Revision 3 to NEI 97-06 make it consistent with plant technical specification requirements without making any substantive technical changes (except as warranted to ensure consistency with technical specification requirements). As a result, the staff concludes that the NEI 97-06 program as described in Revision 3, when properly implemented in accordance with technical specification requirements, should remain effective at managing the aging effects associated with steam generator tubes, plugs, sleeves, and secondary side internals.

In reviewing the changes made to NEI 97-06, the staff noticed that the incorrect revision to the Steam Generator Integrity Assessment Guidelines was referenced in Chapter X1.M19 of NUREG-1801, Revision 2. The correct reference should be "EPRI 1019038, *Steam Generator Integrity Assessment Guidelines, Revision 3*, Electric Power Research Institute, Palo Alto, CA, November 2009." These guidelines were the guidelines in effect at the time NUREG-1801, Revision 2 was issued.

## **ACTION**

The staff is recommending that applicants for license renewal follow the guidance provided in Revision 3 of NEI 97-06 when implementing their steam generator aging management program, including using Revision 3 of the Steam Generator Integrity Assessment Guidelines.

## **NEWLY IDENTIFIED SYSTEMS, STRUCTURES, AND COMPONENTS UNDER 10 CFR 54.37(b)**

None

## **BACKFITTING DISCUSSION**

There is no change to the staff's position. The changes in the guidelines are strictly editorial and thus there is no backfit involved.

## **APPENDICES**

None

## **REFERENCES**

Electric Power Research Institute 1019038, "Steam Generator Management Program: Steam Generator Integrity Assessment Guidelines, Revision 3," November 2009. ML100480264

NEI 97-06, Revision 2, "Steam Generator Program Guidelines," May 2005. ML052710007

NEI 97-06, Revision 3, "Steam Generator Program Guidelines," January 2011. ML111310712

NUREG-1800, Revision 2, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants," December 2010. ML103490036

NUREG-1801, Revision 2, "Generic Aging Lessons Learned (GALL) Report," December 2010. ML103490041