



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 16, 2016

MEMORANDUM TO: Steven D. Bloom, Chief
Subsequent Renewal, Guidance,
and Operations Branch
Division of License Renewal
Office of Nuclear Reactor Regulation

FROM: Heather M. Jones, Project Manager */RA/*
Subsequent Renewal, Guidance,
and Operations Branch
Division of License Renewal
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SUBJECT: SUMMARY OF THE PUBLIC MEETING TO DISCUSS COMMENTS ON
THE DRAFT SUBSEQUENT LICENSE RENEWAL GUIDANCE
DOCUMENTS

On April 26, 2016, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 3 public meeting to discuss the comments received on the draft subsequent license renewal guidance documents. The meeting summary package is available in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession No. ML16119A236.

Enclosures:
1) Meeting Summary
2) Participant List

CONTACT: Heather Jones, NRR/DLR
301-415-4054

cc: Reactor License Renewal Stakeholder: GovDelivery

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ADAMS ACCESSION No: **ML16119A236 (package), ML16119A432 (Slides), ML16119A344 (agenda), and ML16119A253 (Meeting summary)**

OFFICE	LA:RPB1:DLR	PM:RSRG:DLR	BC:RSRG:DLR
NAME	IBetts	HJones	SBloom
DATE	5/9/16	5/12/16	5/16/16

OFFICIAL RECORD COPY

Meeting Summary

Opening Remarks

During the opening remarks, the U.S. Nuclear Regulatory Commission (NRC) managers and staff relayed that the focus of the meeting was to discuss the NRC staff's disposition of the comments received on the draft subsequent license renewal (SLR) guidance documents issued in December 2015, with a public comment period ending on February 29, 2016:

- NUREG-2191, "Generic Aging Lessons Learned for Subsequent License Renewal (GALL-SLR) Report," Volumes 1 and 2 (ADAMS Accession Nos. ML15348A111 and ML15348A153) and
- NUREG-2192, "Standard Review Plan for Review of Subsequent License Renewal Applications for Nuclear Power Plants" (SRP-SLR) (ADAMS Accession No. ML15348A265).

The April 26, 2016, public meeting was the first opportunity, since the public comment period ended, that the NRC staff had to discuss its initial disposition of public comments and the planned updates to the draft SLR guidance documents. The discussion included comments which were accepted, partially accepted, or not accepted.

The participants were informed that the final SLR guidance documents were on schedule to be issued in July 2017 to support the staff's readiness to review an SLR application anticipated to be submitted to the NRC in 2019.

The participants were reminded that the April 26, 2016, public meeting would include a discussion of the noteworthy comments pertaining to the mechanical aging management programs (AMPs). The discussion was structured to begin with a summary of the submitted comment, followed by the staff's disposition of the comment and the technical basis supporting the disposition, as well as the staff's recommendation for updating the SLR guidance documents.

The meeting participants were provided an opportunity to ask questions or offer comments during the staff's presentations. The meeting participants were informed that additional public meetings would be held in the near future to discuss: 1) outstanding issues or action items from this public meeting; 2) mechanical AMPs that were not discussed during this public meeting; 3) structural AMPs; and 4) electrical AMPs.

The staff reminded the participants that not all comments submitted during the public comment period would be discussed during the public meetings. However, all comments submitted during the public comment period on the draft SLR guidance documents would be dispositioned, and their disposition documented in a technical basis document that would be issued as a NUREG following the issuance of the final SLR guidance documents in 2017.

Below is a summary of the topics that were discussed. The attachments referenced below are from the letter dated February 29, 2016 (ADAMS Accession No. ML16069A068):

1. Attachment 1: Issue No. 9 – Removal of Fouling Deposits (AMPs XI.M20, Open-Cycle Cooling Water System, and XI.M27, Fire Water System); Attachment 1: Issue No. 10 – Surface Exams for Aluminum (AMP XI.M36, External Surface Monitoring of Mechanical Components, and AMP XI.M38, Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components); Attachment 2: Comment Nos. 4-6 – Aluminum and Stainless Steel Cracking and Loss of Material; Attachment 2: Comment No. 7 – Stainless Steel and Nickel Alloy in Treated Water; Attachment 2: Comment No. 3 – Long-term Loss of Material; Attachment 2: Comment No. 16 – Stainless Steel, Nickel Alloy, Copper Alloy in Air Indoor Environment; Attachment 2: Comment Nos. 37-41 – Air Definitions and AMP XI.M24, Compressed Air Monitoring; Attachment 4: AMP XI.M36 and AMP XI.M38 – Acceptance Criteria (Staff seeking clarification); Attachment 4: AMP XI.M32, One-Time Inspection – Reduction in Site Wide Inspections; Attachment 4: AMP XI.M33, Selective Leaching – Reduction in Destructive Examinations; Attachment 4: AMP XI.M42, Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks – Acceptance of Blisters and final safety analysis report [FSAR] Supplement

The staff presented their initial disposition of comments on the balance of plant mechanical AMPs and aging management review (AMR) line items listed above. The staff also presented plans for updating the SLR guidance documents based on the comments that were accepted and partially accepted. The industry presented several presentation slides that further clarified their submitted comments in relation to the above topics.

Action: The staff agreed to present on the following topics at a future public meeting: 1) long-term loss of material; and 2) AMR line items associated with air definitions and AMP XI.M24.

2. Attachments 1, 2 and 3: Managing Aging Effects of PWR Vessel Internals for SLR (AMP XI.M16A)

The staff presented their plans to reinstate: 1) a modified version of AMP XI.M16A, Pressurized Water Reactor (PWR) Vessel Internals, into the GALL-SLR Report; and 2) AMR line items associated with AMP XI.M16A. The staff also outlined their expectation for a SLR applicant to submit a gap analysis that identifies changes required to extend the 60-year analysis in Material Reliability Program (MRP)-227-A to account for 80 years of operation. The industry presented their plans and timelines for updating several MRP documents that describe industry methods for managing the aging effects of PWR vessel internals.

Action: The staff agreed to hold additional public meetings to discuss the progress on the industry's: 1) updates to the relevant MRP documents; and 2) development of a gap analysis that would support 60 to 80 years of operation.

3. Attachments 1 and 3: AMP X.M2, Neutron Fluence Monitoring

The staff presented the purpose and intent of the new AMP X.M2. The industry expressed concerns that AMP X.M2 would introduce the redundant neutron fluence monitoring of vessel internals, in addition to what is already recommended in existing AMPs in the GALL-SLR Report. The staff reiterated that it was not the intention of AMP X.M2 to recommend redundant activities. However, the staff agreed to evaluate the wording of the AMP for added clarity.

There are no additional actions associated with this AMP.

4. Attachments 1 and 5: AMP XI.M31, Reactor Vessel Material Surveillance

The staff discussed the comments that have been dispositioned related to XI.M31 and explained how the AMP would be updated to incorporate accepted comments. The staff stated that an additional capsule would need to be pulled and tested during the subsequent period of extended operation. The staff reiterated that it is unacceptable for SLR applicants to perform sampling on, or credit past sampling performed on, capsules that were pulled during the first 40 years of operation or during the first period of extended operation.

Action: The staff recognized that not all of the 53 comments received on AMP XI.M31 have been dispositioned. The staff agreed to present how the remaining, noteworthy comments were dispositioned at future meetings.

5. Attachments 1 and 3: AMP XI.M5, Boiling Water Reactor Feedwater Nozzle

The staff discussed plans to retain AMP XI.M5.

Action: The staff recognizes that the industry may have operating experience which indicates that AMP XI.M5 is obsolete and can therefore be deleted from the GALL-SLR Report. The staff agreed to allow industry to present this operating experience at a future public meeting.

6. Attachments 1 and 3: AMP XI.M7, Boiling Water Reactor Stress Corrosion Cracking

The staff discussed the disposition of a comment submitted by industry related to reactor coolant temperature thresholds, and how the AMP would be updated to incorporate the accepted comment.

There are no additional actions associated with this AMP.

7. Attachments 1 and 3: AMP XI.M11B, Cracking of Nickel-Alloy Components and Loss of Material Due to Boric Acid-Induced Corrosion in Reactor Coolant Pressure Boundary Components (Pressurized Water Reactors Only)

The staff presented their plans to recommend that a qualified volumetric examination method be performed on the bottom mounted instrumentation (BMI) nozzles, and nickel alloy branch line connections and welds. The industry expressed concerns that the examinations were unnecessary based on operating experience of completed test results that indicated the examinations were not warranted because no significant issues had been identified. The staff questioned the validity of the test results.

Action: The staff agreed to participate in further discussions on this topic at a future public meeting.

8. Attachments 1 and 3: AMP XI.M18, Bolting Integrity

The staff presented their plans to update AMP XI.M18 based on the accepted or partially accepted comments. The industry stated that the current version of the GALL Report, Revision 2, requires examination of all bolts and expressed concerns that this activity was burdensome. The staff disagreed that the version of the AMP for first license renewals and subsequent license renewals recommends the examination of all bolts. The staff stated that examinations of the bolts are sample based. However, the staff agreed to review the AMP to ensure its language was

consistent with NRC staff expectations.

There are no additional actions associated with this AMP.

9. Closing Remarks

The staff reiterated that several meetings would be scheduled in the near future to further discuss the comments received on the draft SLR guidance documents.

Action: The staff agreed to present on AMP X.M1 and SRP-SLR Section 4.3 at one of the future public meetings.

10. Public Participation

There were numerous participants present at the public meeting location of the Commission Hearing Room in the One White Flint building of NRC headquarters. There were also participants listening on the bridge line and following the presentations via GoToWebinar.

One member of the public, Marvin Lewis, participated during the meeting via the bridge line.

Participant List

<u>Participants</u>	<u>Affiliation</u>
Chris Miller	U.S. Nuclear Regulatory Commission (NRC)
Jane Marshall	NRC
Steven Bloom	NRC
Dennis Morey	NRC
Allen Hiser	NRC
Heather Jones	NRC
William Holston	NRC
Jim Medoff	NRC
Carolyn Fairbanks	NRC
Matt Hardgrove	NRC
Amrit Patel	NRC
Seung Min	NRC
Roger Kalikian	NRC
Bennett Brady	NRC
Albert Wong	NRC
Raj Iyengar	NRC
Rob Tregoning	NRC
Ganesh Cheruvenki	NRC
Bernie Litkett	NRC
Istvan Frankl	NRC
Chris Hovanec	NRC
Jeff Poehler	NRC
Austin Young	NRC
Sarah Obadina	NRC
Brian Wittick	NRC
Appajosula Rao	NRC
Matt Hiser	NRC
Paul Aitken	Dominion
Mike Franklin	Duke Energy
Ted Ivy	Entergy
Mike Burke	Westinghouse
Kathryn Sutton	Morgan Lewis
Pierre Young	Ameren Missouri
Sherry Bernhoft	Electric Power Research Institute (EPRI)
Jon Hornbuckle	SNC
Abdul Dullo	Westinghouse
Jerud Hanson	Nuclear Energy Institute (NEI)
Craig Heah	Dominion
Eric Blocher	Dominion
John Thomas	Dominion
Bernie Rudell	Exelon
Peter Tamburro	Exelon
Kyle Amberge	EPRI
Mark Richter	NEI
Bob Coad	via GoToWebinar

Gary Rhoads	via GoToWebinar
Marvin Lewis	via GoToWebinar
Matt Kelley	via GoToWebinar
Terry Herrmann	via GoToWebinar
William Fowler	via GoToWebinar
Christopher Reidl	via GoToWebinar
Donna Gilmore	via GoToWebinar
Erica Gray	via GoToWebinar
Chris Mallner	via GoToWebinar
Patricia Borchmann	via GoToWebinar
Tom Demers	via GoToWebinar
Chris Lohse	via GoToWebinar