

June 14, 2010

MEMORANDUM TO: Jerry Dozier, Chief  
Aging Management of Reactor Systems  
and Guidance Update  
Division of License Renewal  
Office of Nuclear Reactor Regulation

FROM: Robert Gramm, Sr. Mechanical Engineer */RA/*  
Aging Management of Reactor Systems  
and Guidance Update  
Division of License Renewal  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE LICENSE RENEWAL PUBLIC WORKSHOP TO  
DISCUSS DRAFT CHANGES TO THE GENERIC AGING LESSONS  
LEARNED REPORT AND THE STANDARD REVIEW PLAN FOR  
LICENSE RENEWAL

The U.S. Nuclear Regulatory Commission staff (NRC or the staff) held a public workshop on May 26 - 28, 2010, to discuss the draft NUREG-1801, Revision 2, "Generic Aging Lessons Learned (GALL) Report," dated May 2010, and draft NUREG-1800, Revision 2, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants," dated May 2010. Enclosures to this letter are a list of the meeting participants and the meeting agenda. The NRC staff provided several handouts, including presentation material, at this workshop. Representatives of the Nuclear Energy Institute (NEI) also provided presentations at the workshop. Both the NRC and NEI presentations and other handout material are available in the NRC's Agencywide Documents Access and Management System under Accession No. ML101440420 and ML101470042 respectively.

A summary of the meeting's major discussions follows.

The staff stated the primary purpose of the workshop was to provide a forum for having discussions about the draft license renewal guidance documents, so the staff could outline the reasons for the major revisions, so that external stakeholders could ask questions and provide informal comments about the drafts. The staff stressed that formal comments on the draft documents need to be submitted in accordance with the Federal Register Notice (75 FR 27838) announcing the availability of the documents for comment.

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The staff handed out a proposed replacement Table 3.0-1 for the Standard Review Plan – License Renewal (SRP-LR) as the table published in the draft NUREG did not list the aging management programs in sequential order and some information was missing from the draft table. Stakeholders were asked to provide comments on the proposed replacement table.

Significant changes in the draft SRP-LR and the GALL Report were presented by the staff. The industry participants commented favorably on the improved organization of material in the draft documents and the increased aging management focus.

The staff discussed the more significant changes made in the draft structural aging management program elements. The industry provided four sets of informal comments during the workshop regarding: 1) the current licensing bases for protective coatings of the majority of the plants is to an earlier version of the associated NRC Regulatory Guide than in the draft GALL Report, this will result in a large number of exceptions; 2) the draft GALL Report specifies volumetric examinations for a larger population of high strength bolts than is appropriate; 3) operating experience does not support the draft GALL Report specifying the need for augmented examinations of containment penetrations; and 4) the appropriate interval for structures monitoring and masonry wall inspections should be based on criteria from the Maintenance Rule implementation rather than specifying a fixed specific interval in the draft GALL report. The entire set of industry comments can be found in the referenced ADAMS industry slide presentation.

The staff discussed the more significant changes made in the draft balance-of-plant mechanical systems aging management program elements. The industry provided a number of comments about the draft aging management program for buried and underground piping and tanks. The industry expressed a major concern that draft requirements to conform to NACE International standards (for aspects such as cathodic protection) would not be consistent with the design bases for plants seeking license extension. The staff and industry agreed that there was a need for further technical dialogue on this particular aging management program and that the industry would accelerate submittal of their formal comments in this area to the NRC.

The industry also provided a general comment that they believe more flexibility should be allowed for applicants to use later revisions of industry standards that are referenced in the GALL report. The staff responded that the GALL Report should only reference industry generated documents where the staff has had the opportunity to review and find the documents suitable for the intended application. The staff indicated they understood the industry concern and will take action to investigate an appropriate method for using later editions of referenced documents and standards. Other industry comments and concerns on mechanical aging management program aspects are contained in NEI's slide presentation.

The staff discussed the more significant draft changes related to inaccessible power cables that are based on the evaluation of operating experience information. The industry provided a number of comments on aging management programs related to electrical aspects in their slide presentation.

The industry participants asked some general questions about the intended process to transition to using the draft revision of the license renewal guidance documents and how it would affect applications currently under review or planned for submittal in early 2011. The staff indicated

that the draft will become official upon formal issuance, however near term applications should be attentive to the content of the draft guidance documents.

The industry and the staff agreed that selected topics will benefit from having further dialogue, particularly the draft aging management programs for buried piping and tanks. The staff reiterated for all participants that it is necessary to submit formal comments on the draft documents to ensure they are considered by the staff going forward. The industry commented that the workshop was beneficial as it provided a greater understanding about the background and logic behind the content of the draft guidance documents.

A member of the public provided several informal comments on aging management programs related to nuclear steam supply system topics.

Enclosures:  
As stated

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## PARTICIPANT LIST

### License Renewal Workshop NRC Discussion of the Draft Generic Aging Lessons Learned Report and Standard Review Plan with Interested Public Stakeholders

May 26 - 28, 2010

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Amy Hull	NRC
James Medoff	NRC
Rachel Vaucher	NRC
Bart Fu	NRC
Ganesh Cheruvenki	NRC
Dan Doyle	NRC
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Albert Wong	NRC
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Bruce Lin	NRC
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Eric Blocher	STARS
Michael Fallin	Constellation Energy
Cliff Custer	FENOC
Al Fulvio	Exelon
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Garry G. Young	Entergy
Julie Keys	Nuclear Energy Institute (NEI)
John Butler	NEI
James Johnson	STARS
Al Saunders	STARS
Mike Heath	Progress Energy
Alan Cox	Entergy
David Mosby	Enercon Services
Brad Myers	BCP Engineers
Ali Kodal	Next Era Energy/Seabrook
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Steve Toney	Westinghouse
Michael Gallagher	Exelon
Eugene Kelly	Exelon
Roger Rucker	Entergy
Debbie Spamer	Exelon
Chris Browne	NISYS/Enercon Svcs.

ENCLOSURE 1

<b>Name</b>	<b>Affiliation</b>
Fred Polanski	Polanski Consulting LLC
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Dennis Lundy	TVA
Dan Shulman	Enercon
Charles Moldenhauer	Morgan Lewis and Bockius
Sharon Merciel*	Ameren-Callaway
Steven Hamrick*	FPL
Edward Simonen*	PNNL

\* Participated by teleconference

## WORKING AGENDA

### License Renewal Workshop for the U.S. Nuclear Regulatory Commission (NRC) Staff to Discuss the Draft Generic Aging Lessons Learned (GALL) Report and Standard Review Plan with External Stakeholders

May 26 - 28, 2010

#### Wed 5/26 (9:00 am - 4:30 pm)

**NRC** - Opening/introductions (5 min)

**NRC** - Purpose of workshop and Overview of LR guidance document update initiative (5 min)

**NRC/ATL** - (NRC contractor) - SRP High Level Changes (15 min)

**NRC/ATL** - GALL High Level Changes (15 min)

**NEI** - Overview Comments on LR guidance document update (5 min)

#### Structural GALL and SRP-LR Chapters/Topics

- NRC/ATL provides overview of major changes
- NEI/industry feedback/comments
- Other public stakeholder feedback/comments

9:45 am – 10:05 am Protective coatings (AMP S8 and related GALL AMR information)

10:05 am – 10:10 am Appendix J (AMP S4 and related GALL AMR information)

10:10 am – 12:00 am Structural topics (AMPs S1, S2, S3, S5, S6, S7 and related GALL AMR information)

12:00 pm – 1:00 pm Lunch

1:00 pm – 2:15 pm Continue on structural topics

#### Mechanical (BOP) GALL and SRP-LR Chapters/Topics

- NRC/ATL provides overview of major changes
- NEI/industry feedback/comments
- Other public stakeholder feedback/comment

2:15 pm – 3:30 pm Buried piping (AMP M41 and related GALL AMR information)  
- NEI discussion topic

3:30 pm – 4:15 pm Misc (AMPs M17, M18, M22, M30, M39, M40 and related GALL AMR information)  
- NEI discussion topic (M30)

4:15 pm – 4:25 pm Fire Protection (AMPs M26, M27 and related GALL AMR information)

ENCLOSURE 2



**Thur 5/27 (9:00 am - 4:30 pm)**

**NRC** - Opening/introductions (5 min)

**Mechanical (BOP) GALL and SRP-LR Chapters/Topics**

- NRC/ATL provides overview of major changes
- NEI/industry feedback/comments
- Other public stakeholder feedback/comment

- 9:10 am – 9:25 am One-time and selective leaching (AMPs M32, M33 and related GALL AMR information)
- 9:25 am – 9:35 am Treated water (AMP M21A and related GALL AMR information)
- 9:35 am – 9:50 am Misc (AMPs M20, M23, M24, M25, M29 and related GALL AMR information)
- 9:50 am – 10:15 am Internal and external surfaces (AMPs M36, M38 and related GALL AMR information)  
- NEI discussion topic (M36)
- 10:15 am – 10:30 am Break

**Mechanical (NSSS) GALL and SRP-LR Chapters/Topics**

- NRC/ATL provides overview of major changes
- NEI/industry feedback/comments
- Other public stakeholder feedback/comment

- 10:30 am – 10:35 am ISI (AMP M1 and related GALL AMR information)
- 10:35 am – 11:15 am Class 1 small bore (AMP M35 and related GALL AMR information)  
- NEI discussion topic
- 11:15 am – 11:45 am BWR AMPs (AMPs M4, M5, M6, M7, M8 and related GALL AMR information)
- 11:45 am – 12:00 pm BWR Vessel Internals (AMP M9 and related GALL AMR information)
- 12:00 pm – 1:00 pm Lunch
- 1:00 pm – 1:45 pm Fatigue (X.M1, SRP 4.3)  
- NEI discussion topic
- 1:45 pm – 2:30 pm General (AMPs M2, M3, M12 and related GALL AMR information)  
- NEI discussion topic M2
- 2:30 pm – 2:40 pm RV Surveillance (AMP M31, SRP 4.2 and related GALL AMR information)
- 2:40 pm – 3:10 pm PWR Internals (AMP M16A and related GALL AMR information)
- 3:10 pm – 3:25 pm PWR Nickel-Alloy Cracking (APM M11B and related GALL AMR information)
- 3:25 pm – 3:40 pm PWR (APMs M10, M19, M37 and related GALL AMR information)

3:40 pm – 4:30 pm Mechanical AMR Line Items and Open Discussion

**Fri 5/28 (8:30 am - 12:00 pm)**

**NRC** - Opening/introductions (10 min)

**Electrical GALL and SRP-LR Chapters/Topics**

- NRC/ATL provides overview of major changes
- NEI/industry feedback/comments
- Other public stakeholder feedback/comments

8:40 am – 9:30 am Inaccessible power cables (AMPS E3 and related GALL AMR information)  
- NEI discussion topic

9:30 am – 11:50 am Electrical (AMPS X.E1, XI.E1, E2, E4, E5, E6 and related GALL AMR information)

**NEI** closing comments (5 min)

**NRC** discuss next steps and closing (5 min)