



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

August 22, 2014

MEMORANDUM TO: Bennett Brady, Acting Chief
Subsequent Renewal, Guidance,
and Operations Branch
Division of License Renewal
Office of Nuclear Reactor Regulation

FROM: Evelyn H. Gettys, Project Manager **/RA/**
Subsequent Renewal, Guidance,
and Operations Branch
Division of License Renewal
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE MEETING BETWEEN THE U.S. NUCLEAR
REGULATORY COMMISSION STAFF AND THE NUCLEAR
ENERGY INSTITUTE TO DISCUSS SUBSEQUENT LICENSE
RENEWAL TOPICS, AGING MANAGEMENT PROGRAMS
EFFECTIVENESS GUIDE, OPERATING EXPERIENCE GUIDE
AND SUBSEQUENT LICENSE RENEWAL ROADMAP

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of the Nuclear Energy Institute (NEI) met on July 29, 2014, to discuss various topics on license renewal. NEI and various representatives from the industry gave tabletop presentations on several topics concerning the proposed changes to the Institute of Nuclear Power (INPO) database of operating experience (OE) that will flag issues that are age-related, and how the industry captures OE and how that supports their self-assessment of AMP effectiveness. The agenda and slide presentations are available in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession No. ML14211A413. Enclosed is a list of the meeting participants.

1) Use of industry operating experience for the age-related degradation and aging management programs

NEI is proposing changes to the INPO guidelines (IAW INPO 12-009) for plant reporting of OE into their corrective action programs (CAP) that would include a new category for "age-related degradation." This new category would screen in passive long-lived components or structures to be identified as OE which possibly could have important generic implications for other plants with similar designs. The industry went through several table top examples of how this change could be implemented. These proposed changes are on event reporting requirements that would identify unanticipated age-related degradation, or trends that

CONTACT: Evelyn Gettys, NRR/DLR
301-415-4029

are not considered failures. This OE could then be utilized to identify deficiencies that may be indicative of generic AMP ineffectiveness with the goal of improving or validating the effectiveness of AMPs across the industry.

2) Review of NEI preliminary draft guidance document "Aging Management Programs"

NEI walked the staff through several internal plant documents to demonstrate the type of reporting that a CAP provides to support AMP effectiveness. The tabletop examples showed how a plant which has identified an issue, documents the issue in the CAP, and how that issue generates follow-up actions that a plant takes to modify the AMP.

3) Subsequent License Renewal Roadmap Review

The staff looked over the draft NEI roadmap that was provided in December 2013 (ADAMS Accession No. ML13352A340). The staff did not see any show stoppers but commented that there is much technical work needed to demonstrate the technical basis for operation beyond 60 years. The NRC and industry are in alignment on the identification of the major technical issues for operation from 60-80 years, but NRC does not see from the roadmap that all of the technical issues will be addressed in time for the first SLR application. The roadmap does not take into account any difficulties with the review of the SLR application, which could impact the schedule for completion of the review. The NRC stressed the importance of updating Electric Power Research Institute (EPRI) topical reports, such as the MRP-227-A, which the Generic Aging Lesson Learn Program AMP relies on.

4) Action Items

- a. NRC will review the two draft guidance line documents (OE and AMP effectiveness self-assessment) and discuss with NEI in the future.
- b. NRC will provide NEI with examples of AMPs for which it is difficult to develop a generic AMP due to lack of technical information to justify safe operation beyond 60 years or lack of topical reports addressing operation to 80 years.
- c. NRC and NEI will discuss the timing of revisions to NEI 95-10 and RG 1.188 for planning and budgeting for these revisions.
- d. The NRC suggested that MRP-227 should be considered for revision to address operation for 60 to 80 years.

cc w/encl: Reactor License Renewal Stakeholder Group Listserv

are not considered failures. This OE could then be utilized to identify deficiencies that may be indicative of generic AMP ineffectiveness with the goal of improving or validation the effectiveness of AMPs across the industry.

2) Review of NEI preliminary draft guidance document "Aging Management Programs"

NEI walked the staff through several internal plant documents to demonstrate the type of reporting that a CAP provides to support AMP effectiveness. The tabletop examples showed how a plant which has identified an issue, reports the issue into the CAP, and how that issue generates follow-up actions that a plant takes to modify the AMP.

3) Subsequent License Renewal Roadmap Review

The staff looked over the draft NEI roadmap that was provided in December 2013 (ADAMS Accession No. ML13352A340). The staff did not see any show stoppers but commented that there is much technical work needed to demonstrate the technical basis for operation beyond 60 years. The NRC and industry are in alignment on the identification of the major technical issues for operation from 60-80 years, but NRC does not see from the roadmap that all of the technical issues will be addressed in time for the first SLR application. The roadmap does not take into account any difficulties with the review of the SLR application, which could impact the schedule for completion of the review. The NRC did want to stress the importance of updating Electric Power Research Institute (EPRI) topical reports, such as the MRP-227-A, which the Generic Aging Lesson Learn Program AMP relies on.

4) Action Items

- a. NRC will review the two draft guide line documents (OE and AMP effectiveness self-assessment) and discuss with NEI in the future.
- b. NRC will provide NEI with examples of AMPs for which it is difficult to develop a generic AMP due to lack of technical information to justify safe operation beyond 60 years or lack of topical reports addressing operation to 80 years.
- c. NRC and NEI will discuss the timing of revisions to NEI 95-10 and RG 1.188 for planning and budgeting for these revisions.
- d. The NRC suggested that MRP-227 should be considered for revision to address operation for 60 to 80 years.

cc w/encl: Reactor License Renewal Stakeholder Group Listserv

DISTRIBUTION: See next page

ADAMS ACCESSION No: ML14224A038

*concurred via email

OFFICE	LA:RPB1:DLR*	PM:RSRG:DLR	(A)BC:RSRG:DLR	PM:RSRG:DLR
NAME	YEdmonds	EGettys	BBrady	EGettys
DATE	8/14/14	8/15/14	8/21/14	8/22/14

OFFICIAL RECORD COPY

Memorandum to Bennett Brady from Evelyn Gettys dated August 22, 2014

SUBJECT: SUMMARY OF THE MEETING BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION STAFF AND THE NUCLEAR ENERGY INSTITUTE TO DISCUSS SUBSEQUENT LICENSE RENEWAL TOPICS, AGING MANAGEMENT PROGRAMS EFFECTIVENESS GUIDE, OPERATING EXPERIENCE GUIDE AND SUBSEQUENT LICENSE RENEWAL ROADMAP

DISTRIBUTION

E-MAIL:

PUBLIC

PMNS Receptionist (OWFN)

RidsNrrDlr Resource

RidsNrrDlrRpb1 Resource

RidsNrrDlrRpb2 Resource

RidsNrrDlrRarb Resource

RidsNrrDlrRapb Resource

RidsNrrDlrRsrg Resource

RidsNrrDlrRasb Resource

RidsNrrDeResource

RidsNrrCrgrResource

EGettys, NRR

MGray, RI

SVias, RII

AStone, RIII

GMiller, RIV

AHull, RES

SStuchell, NRR

**Meeting between the U.S. Nuclear Regulatory Commission Staff and the
Nuclear Energy Institute to Discuss Subsequent Renewal Topics
July 29, 2014**

Attendance List

NAME	AFFILIATION
Bo Pham	NRC
John Lubinski	NRC
Michael Marshall	NRC
Evelyn Gettys	NRC
Matt Homiack	NRC
Butch Burton	NRC
Allen Hiser	NRC
Bennett Brady	NRC
Araceli Billoch	NRC
Dennis Morey	NRC
Bill Holston	NRC
Amy Hull	NRC
Harold Chernoff	NRC
Makuteswara Srinivasan	NRC
Richard Tilley	EPRI
Jason Remer	Nuclear Energy Institute (NEI)
Garry Young	Entergy
Mike Franklin	Duke Energy
Eric Blocher	STARS
David Clohecy	Exelon
Alan Cox	Entergy
Terry Herrman	Structural Integrity
Kris Cummings	NEI
Cliff Custer	FENOC
Lynne Goodman	DTE Energy

ENCLOSURE

NAME	AFFILIATION
Terry Hilditch	Exelon
John O'Rourke	RSEG Nuclear
Mike Franklin	Duke Energy
Eugene Kelly	Exelon
Shannon Rafferty-Czincila	Exelon
Hoa Hoang	GE Hitachi Nuclear Energy
Jon Hornbuckle	SNC
James Thomas	ENERCON
Don Williams	ORNL
Al Fulvio	Exelon
Stuart Sheldon	NRC
Kris Banovac	NRC
William Holston	NRC
Paul Aitken	Dominion
Michael Melton	Mitsubishi Nuclear Energy Systems, Inc
Wayne Lunceford	Structural Integrity
Al Csontos	NRC
David Garmon	NRC
Eric Thomas	NRC
John Wise	NRC
Jana Bergman	Sciencetech
Fred Polaski	Polaski Consulting
Glen Masters	INPO
Richard Reister	DOE
John Twomey	Energy Northwest