

May 14, 2015

MEMORANDUM TO: Mohamed K. Shams, Chief
Hazards Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

FROM: Nicholas J. DiFrancesco, Senior Project Manager */RA/*
Hazards Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MARCH 30, 2015, CATEGORY 2 PUBLIC
MEETING WITH THE NUCLEAR ENERGY INSTITUTE TO DISCUSS
SEISMIC HAZARD REEVALUATIONS ASSOCIATED WITH
IMPLEMENTATION OF JAPAN LESSONS-LEARNED NEAR-TERM
TASK FORCE RECOMMENDATION 2.1: SEISMIC

On March 30, 2015¹, the U. S. Nuclear Regulatory Commission (NRC) staff held a Category 2 public meeting with the Nuclear Energy Institute (NEI) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of this meeting was to discuss the overall status and schedules related to the seismic hazard reevaluations associated with the implementation of Recommendation 2.1: Seismic of the March 12, 2012, NRC request for information issued pursuant to Title 10 to the *Code of Federal Regulations* Part 50, Section 50.54(f) (hereafter referred to as the 50.54(f) letter²).

During the meeting Electric Power Research Institute (EPRI) representatives discussed the spent fuel pool evaluations³. Additionally, NRC and NEI representatives discussed the status of plans associated with the review of re-evaluated seismic hazard submittals, the Expedited Seismic Evaluation Process (ESEP) submittals and reviews and the Western United States (WUS) submittals, as described in NRC presented slides³.

CONTACT: Nicholas J. DiFrancesco, NRR/JLD
301-415-1115

¹ The meeting notice is available via the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML15089A025.

² The 50.54(f) letter and Enclosure 1 are available under ADAMS Accession Nos. ML12053A340 and ML12056A047, respectively.

³ EPRI Spent Fuel Pool slide presentation is available under ADAMS Accession No. ML15089A023.

³ NRC's slide presentation is available under ADAMS Accession No. ML15089A022.

NRC staff and NEI representatives' discussions included the following meeting highlights:

Discussion related to Spent Fuel Pool (SFP) Evaluation Approach

1. NRC provided feedback following the NEI/EPRI presentation for the structural portion of the evaluation. NRC staff feedback included the statement that the proposed generic approach should be sufficiently rigorous. NRC staff is interested in additional details as efforts move forward. Industry committed to proposing two plants to conduct spent fuel pool (SFP) structural evaluation to provide coverage variation of spent fuel designs across the fleet. NEI/EPRI plans to leverage NRC generic studies and insights from 3 SFPs (e.g. Vermont Yankee, Peach Bottom, and Robinson) that have previously been modeled.
2. NRC staff requested additional details and timelines on how the other aspects of the SPID⁴ guidance would be implemented with study and with leveraging existing information (e.g. walkdowns, evaluation of penetrations and piping).
3. NEI/EPRI representatives discussed that they are planning to use some inputs from the ongoing seismic probabilistic risk assessment efforts to model structural response which may require additional time to develop inputs.
4. NRC and NEI discussed the need to develop a path-forward to allow most licensees to complete SFP evaluations in a timely manner. The delay stems from industries unanticipated approach to the structural analysis which led NRC to question the adequacy of the existing SPID structural guidance. When the approach is finalized, the guidance can be confirmed. As some low hazard sites are not impacted, two suggestions were made to expedite the review: 1) Low hazard screening assessment, and 2) Allow high-hazard sites to split their submittal, providing structural input at a later date. Both suggestions may be used together.
5. NRC staff discussed the importance of demonstrating that proposed alternative evaluations or application of existing SFP analyses address plant-specific details that might affect the results of these studies significantly.

No regulatory decisions or commitments were made during the meeting. The public was invited to observe the meeting and was given several opportunities to communicate with the NRC during the public meeting and before adjourning. The NRC staff received several public comments, which were addressed during the meeting and no meeting feedback forms were received.

Enclosure:
List of Attendees

⁴ Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic", is available under ADAMS Accession No. ML12333A170.

NRC staff and NEI representatives' discussions included the following meeting highlights:

Discussion related to Spent Fuel Pool (SFP) Evaluation Approach

1. NRC provided feedback following the NEI/EPRI presentation for the structural portion of the evaluation. NRC staff feedback included the statement that the proposed generic approach should be sufficiently rigorous. NRC staff is interested in additional details as efforts move forward. Industry committed to proposing two plants to conduct spent fuel pool (SFP) structural evaluation to provide coverage variation of spent fuel designs across the fleet. NEI/EPRI plans to leverage NRC generic studies and insights from 3 SFPs (e.g. Vermont Yankee, Peach Bottom, and Robinson) that have previously been modeled.
2. NRC staff requested additional details and timelines on how the other aspects of the SPID⁴ guidance would be implemented with study and with leveraging existing information (e.g. walkdowns, evaluation of penetrations and piping).
3. NEI/EPRI representatives discussed that they are planning to use some inputs from the ongoing seismic probabilistic risk assessment efforts to model structural response which may require additional time to develop inputs.
4. NRC and NEI discussed the need to develop a path-forward to allow most licensees to complete SFP evaluations in a timely manner. The delay stems from industries unanticipated approach to the structural analysis which led NRC to question the adequacy of the existing SPID structural guidance. When the approach is finalized, the guidance can be confirmed. As some low hazard sites are not impacted, two suggestions were made to expedite the review: 1) Low hazard screening assessment, and 2) Allow high-hazard sites to split their submittal, providing structural input at a later date. Both suggestions may be used together.
5. NRC staff discussed the importance of demonstrating that proposed alternative evaluations or application of existing SFP analyses address plant-specific details that might affect the results of these studies significantly.

No regulatory decisions or commitments were made during the meeting. The public was invited to observe the meeting and was given several opportunities to communicate with the NRC during the public meeting and before adjourning. The NRC staff received several public comments, which were addressed during the meeting and no meeting feedback forms were received.

Enclosure:

List of Attendees

DISTRIBUTION:

PUBLIC	RidsAcrcAcnw_MailCTR	RidsNroOd	RidsOgcMailCenter
JLD R/F	DiFrancesco, NRR	RidsNrrLASLent	RidsNrrDorl
AKock,NRO	KManoly, NRR	RidsRgn1MailCenter	RidsOpaMail
DJackson, NRO	LYong, NRR	RidsRgn2MailCenter	RidsNroDsea
CMunson, NRO	MJardaneh, NRO	RidsRgn3MailCenter	RidsNrrDe
JAKE, RES		RidsRgn4MailCenter	

ADAMS Accession No.: ML15111A031

*concurrence via e-mail

OFFICE	NRR/JLD/JHMB/PE	NRR/JLD/LA	NRO/DSEA/RGS/BC*	NRR/JLD/JHMB/BC*	NRR/JLD/PMB/PM
NAME	SWyman	SLent	DJackson	MShams	NDiFrancesco
DATE	04/22/15	04/22/15	05/14/15	05/01/15	05/14/15

OFFICIAL RECORD COPY

⁴ Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic", is available under ADAMS Accession No. ML12333A170.

List of Attendees

U.S. Nuclear Regulatory Commission
Public Meeting with the Nuclear Energy Institute
Concerning Seismic Hazard Reevaluation Submittals
Japan Lessons-Learned Near-Term Task Force Recommendation 2.1: Seismic
High Frequency Confirmation
March 30, 2015

Attendees				
Name	Organization		Name	Organization
Andrea Kock	NRC/NRO/DSEA		John Richards	EPRI
Donnie Harrison	NRC/NRO/DSEA		Andrew Mauer	NEI
Diane Jackson	NRC/NRO/DSEA		Greg Hardy	SGH
Stephanie Devlin-Gill	NRC/NRO/DSEA		Michael Tschultz	NEI
Nicholas DiFrancesco	NRC/NRR/JLD		Brittain Hill	NRC/NRO/DSEA
Jose Pires	NRC/RES/DE		Mohamed Shams	NRC/NRR/JLD
Kamal Manoly	NRC/NRR/DE		Siva Lingam	NRR
Yong Li	NRC/NRR/DE		Tim Lupold	NRR/DE
Frankie Vega	NRC/NRR/JLD		(continues to next page)	
Tuan Le	NRC/NRO/DE			
Ian Tseng	NRC/NRR/DE			
Steve Wyman	NRC/JLD			

Abbreviations:

DE – Division of Engineering
DSEA – Division of Site Safety and Environmental Analysis
EPRI - Electric Power Research Institute
DSRA – Division of Safety Systems & Risk

JLD – Japan Lesson Learned Project Directorate
NEI – Nuclear Energy Institute
NRO – Office of New Reactors
NRR – Office of Nuclear Reactor Regulation
RES – Office of Nuclear Regulatory Research
TVA – Tennessee Valley Authority
WCNOC – Wolf Creek Nuclear Operating Co.

Enclosure

Webinar Attendees

First Name	Last Name	Affiliation
Robert	Kassawara	Epri
Marvin	Lewis	
John	OSullivan	Vecsa
Natalie	Doulgerakis	Enercon
Joshua	Hegenderfer	Aecom
Richard	Drake	Enterg
Zhiping	Li	Ameren
Steven	Dolley	Platts
Robert	Miller	Southern Company
Paul	Baughman	P. D. Baughman Consulting
Nadja	Paulman	Xenuclear
Natalie	Camilli	Duke-Energy
Larry	Parker	STARS Alliance
Greg	Lisle	Energy Northwest
Barbara	Owens	Entergy
Tim	Solberg	WCNOC
Doug	True	Erin Engineering
Carlos	Sisco	Winston
Paul	Farish	Duke-Energy
Philip	Tarpinian	Exelon corp
Christopher	Canniff	Dte energy
John	Todd	Scana
Wing	Ho	Exelon corp
Richard	Rogalski	Energy Northwest
Diane	Curran	Harmoncurran
Joe	Litehiser	Bechtel
Pravin	Patel	NRC
Ryan	Vanston	Westinghouse
Robin	McGuire	Lettisci.
Ogden	Sawyer	Areva
Dan	Madden	Dominion
Nozar	Jahangir	PG&E
Greg	DuBois	Sargent Lundy
Albert	Kottke	Bechtel

Jim	Marrone	Bechtel
Nick	Gregor	Bechtel
Marc	Hotchkiss	Dominion
Weijun	Wang	NRC
Penny	Selman	TVA
Robert	Roche	NRC
Sara	Barczak	Clean Energy
Megan	Williams	NRC
Robert	Kennedy	Rpkstruct
John	Fields	Xenuclear
Marlene	Delaney	Vecsa
Whitney	Hemingway	Dte Energy
Divakar	Bhargava	Dominion
Apostolos	Karavoussianis	Vecsa
Brenda	Kovarik	Sargent Lundy
Mutiu	Ayoola	Duke Energy
Charlotte	Geiger	PSEG
Daniel	Vasquez	Dominion
Todd	Swoyer	
Melanie	Brown	Southern Company
Esther	Cho	NRC
Jason	Young	Westinghouse
Ricardo	Rodriguez	NRC
Kelvin	Merz	SGH
Stevie	DuPont	xenuclear
Ram	Srinivasan	
Chikako	Ogura	Tane/Toshiba
Steven	Laur	NRC
GEORGE	ZINKE	Entergy
Calin	Eftimie	
John	Traynor	Exeloncorp
Christopher	Wandell	APS
Gina	Symons	Duke Energy
Jeffrey	Clark	Exelon corp
Justin	Huber	TVA
Jeremy	Graham	Scana

Anthony	Bockelman	
Nicholas	DiFrancesco	NRC
Dale	Wuokko	Tane/Toshiba