

September 12, 2014

MEMORANDUM TO: Sheena A. Whaley, Chief  
Hazards Management Branch  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

FROM: Robert F. Kuntz, Senior Project Manager */RA/*  
Hazards Management Branch  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF AUGUST 21, 2014, PUBLIC MEETING ON  
IMPLEMENTATION OF NEAR-TERM TASK FORCE  
RECOMMENDATION 2.1, FLOODING HAZARD  
REEVALUATIONS, RELATED TO THE FUKUSHIMA  
DAI-ICHI NUCLEAR POWER PLANT ACCIDENT

On August 21, 2014, the Nuclear Regulatory Commission (NRC) staff held a Category 2 public meeting<sup>1</sup> with stakeholders. The purpose of the meeting was to discuss the flooding hazard reevaluations that are being performed as part of Recommendation 2.1 from “Recommendations for enhancing Reactor Safety in the 21<sup>st</sup> Century,” a report issued by the post-Fukushima Near-Term Task Force (NTTF) on July 12, 2011.<sup>2</sup> On March 12, 2012, the NRC issued a request for information pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f) (hereafter referred to as the 50.54 (f) letter) to implement this recommendation.<sup>3</sup>

The Nuclear Energy Institute (NEI) presented the NRC staff with a revised version of frequently asked questions (FAQs) 33 and 35<sup>4</sup> and a revised version of a local intense precipitation (LIP) warning time paper<sup>5</sup>. NEI requested a general discussion on the overall approach presented in the document revisions and to receive feedback from the NRC staff.

CONTACT: Robert F. Kuntz, NRR/JLD  
301-415-3733

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<sup>1</sup> The original meeting notice is available via the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML14219A587.

<sup>2</sup> The NTTF report is available under ADAMS Accession No. ML111861807.

<sup>3</sup> The 50.54(f) letter is available under ADAMS Accession No. ML12053A340.

<sup>4</sup> NEI revised document for the FAQ 33 and 35, with staff comments is available under ADAMS Accession No. ML14238A557.

<sup>5</sup> NEI revised document for the LIP warning time paper is available under ADAMS Accession No. ML14238A550.

FAQs 33 and 35 provided by NEI are intended to provide additional information and clarification for scenarios related to the flood hazard reevaluation report (FHRR). FAQ 33 is related to options that can be considered by licensees in order to develop interim actions as part of the FHRR and FAQ 35 is related to circumstances and processes for submitting updates to a FHRR already submitted to the NRC. In general, the staff stated that the intent of some of the statements in the FAQs and associated answers could be more clearly stated to reduce ambiguity. NEI staff also provided clarifying explanations to some of the overall comments from the NRC staff.

In regards to FAQ 33, the staff stated that the 50.54(f) letter indicates that licensees are requested to provide interim actions taken or planned to address the reevaluated hazard and the appropriateness of the actions will be reviewed on a site-by-site basis. The staff also stated that the proposed FAQ version may unintentionally misrepresent the results from the FHRR as being non-credible events that need further refinement. As such, the staff stated that existing NRC guidance, such as NUREG/CR-7046 "Design-Basis Flood Estimation for Site Characterization at Nuclear Power Plants in the United States of America", allows for the refinement of hazards for each flood-causing mechanism as part of the review hierarchical hazard assessment process. Staff also noted that some of the concepts described in the paper are still under internal consideration among the staff.

In regards to FAQ 35, the staff expressed concerns about the submittal of multiple revisions to the FHRR by a licensee based on improved different assumptions or updated models that could lead to an iterative process. In general, this may lead to unnecessary review of portions of the FHRR and ineffective use of time and resources by both the licensee and the NRC. The staff stated that the March 1, 2013 letter allows the request of an extension to submit the FHRR in the event that a licensee is unable to submit a complete FHRR.

The LIP warning time paper provides additional guidance on adequate warning time estimation for planned responses to a LIP rain event. The staff questioned NEI on the source for the citation of the highest one hour rainfall event. NEI stated that the information was gathered from the National Weather Service's web site but agreed that it was not a one-hour event. The NRC staff also commented that an estimated storm in 1943 produced a higher one-hour total than the one cited in the paper and that NEI should consider citing the source in the paper. The staff also commented that the paper frequently discusses the LIP event, but the staff notes that events less than the LIP can produce consequential rainfall. The staff also noted that the paper should include citations supporting the forecasting reliability claimed in the white paper. For example, the staff noted that the white paper's characterization of certain forecasts having "moderate" reliability is not objective, and not supported by literature cited in the paper. The staff stressed the need for the warning time estimation to take into account objective metrics of forecast accuracy and reliability that are available in peer-reviewed literature.

Prior to concluding the meeting, an opportunity for public comment was afforded. No comments or public meeting feedback forms were received.

Enclosure:  
Lists of Attendees

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**ADAMS Accession No.:** ML14251A565

\* via e-mail

<b>OFFICE</b>	NRR/JLD/ LA*	NRR/JLD/JHMB/PM	NRR/JLD/JHMB/BC	NRR/JLD/JHMB/PM
<b>NAME</b>	SLent	RKuntz	SWhaley	RKuntz
<b>DATE</b>	09/09/14	09/11/14	09/12/14	09/12/14

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Memo to Sheena A. Whaley from Robert F. Kuntz dated September 12, 2014

SUBJECT: SUMMARY OF AUGUST 21, 2014, PUBLIC MEETING ON IMPLEMENTATION OF NEAR-TERM TASK FORCE RECOMMENDATION 2.1, FLOODING HAZARD REEVALUATIONS, RELATED TO THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT

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Public Meeting to Discuss Topics Associated with Flooding Hazard  
Thursday, August 21, 2014

List of Attendees

<b>Name:</b>	<b>Organization:</b>	<b>Name:</b>	<b>Organization:</b>
Rob Kuntz	U.S. Nuclear Regulatory Commission (NRC)	Charlotte Geiger	Public Service Electric and Gas (PSEG)
Juan Uribe	NRC	Andy Langdon	Energy Northwest
Michelle Bensi	NRC	Richard Bologna	FirstEnergy
Kevin Quinlan	NRC	Richard Pinney	Dept. of State
Jeff Mitman	NRC	Nancy Chapman	Bechtel
MJ Jardaneh	NRC	George Attarian	---
Joseph Kanney	NRC	Gary Demoss	PSEG
Ken Erwin	NRC	Brenda Kovarik	Sargent Lundy
Joseph Sebrosky	NRC	Richard Rogalski	Energy Northwest
Andy Campbell	NRC	Rick Rohrer	XE Nuclear
Yuan Cheng	NRC	David Mosby	Enercon
Thomas Nicholson	NRC	John Traynor	Exelon
Jessica Voveris	NRC	Richard Giachetti	Westinghouse
Carla Roquecruz	NRC	Collin Keller	First Energy
Marie Pohida	NRC	Drew Miller	Erin Engineering
Suzanne Schroer	NRC	Bill Kappel	---
Jim Riley	Nuclear Energy Institute	Nadja Paulman	XE Nuclear
Mark Moenssens	Westinghouse	Penny Selman	Tennessee Valley Authority
Don Bentley	Entergy	Gary Ruf	PSEG
Joe Bellini	Aterra/Exelon	Mark Hammons	FTN/NPPD
Dean Hubbard	Duke Energy	Kelvin Montague	Duke Energy
John Giddens	Southern Nuclear	Dave Bucheit	Dominion
Carl Corbin	Luminant	Lawrence Lana	Enercon
Dale Wuokko	Toshiba	Jim Smith	Westinghouse
Gary Smith	Enercon		

Enclosure