

August 16, 2013

MEMORANDUM TO: Matthew A. Mitchell, Chief
Projects Management Branch
Japan Lessons-Learned Project Directorate
Office of Nuclear Reactor Regulation

FROM: Lisa M. Regner, Sr. Project Manager */RA/*
Projects Management Branch
Japan Lessons-Learned Project Directorate
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE AUGUST 6, 2013, PUBLIC TELECONFERENCE
TO DISCUSS THE ELECTRIC POWER RESEARCH INSTITUTE
GROUND MOTION MODEL UPDATE PROJECT

On August 6, 2013, the Nuclear Regulatory Commission (NRC or the staff) held a Category 2 public teleconference¹ to discuss the Electric Power Research Institute (EPRI) Ground Motion Model (GMM) update project. This project supports licensees' efforts to perform plant-specific seismic hazard reevaluations as requested by the NRC's March 12, 2012, request for information per Title 10 to the *Code of Federal Regulations*, Section 50.54(f) (the 50.54(f) letter). Enclosure 1 to the request for information letter includes Recommendation 2.1: Seismic.

The meeting participants are included in the enclosure to this document.

On June 3, 2013, the industry submitted the EPRI (2004, 2006) GMM Review Project Final Report² to the NRC. The industry presented highlights from this report during an NRC public meeting on June 5, 2013,³ and the NRC provided written questions to industry on July 5, 2013.⁴ On July 30, 2013, industry submitted written responses to the NRC staff questions, as well as an errata sheet with corrections to the report resulting from NRC staff comments.⁵

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1 The meeting notice is available in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML13164A194.
2 The report submitted on June 3, 2013 is available in a ADAMS package under Accession No. ML13155A553.
3 The meeting summary and presentation materials from the June 5, 2013 public meeting are available in a package under Accession No. ML13169A024.
4 The NRC staff questions are available in ADAMS under Accession No. ML13178A361.
5 The written responses to the NRC staff questions and errata sheet are available in ADAMS in a package under Accession No. ML13218A052.

During this public meeting, EPRI presented two slide presentations⁶ which summarized answers to questions received from the NRC staff on the EPRI (2004, 2006) GMM Review Project Final Report.

As the EPRI representatives stepped through the slides, NRC staff raised questions for clarification or stated that the answer provided sufficiently addressed the original staff question.

One item that was discussed in detail was the response to a staff question related to the boundary defined in the report for the Gulf region. The staff asked a number of questions which were addressed by an EPRI representative. Following the discussion, the NRC staff stated that the discussion had been helpful, that they had collected information that they would discuss further internally, and if any additional information needs to be provided by EPRI on this topic, the staff would let them know.

Another item that was discussed in detail was related to a staff question on the processing of the data performed by Cramer as part of the NGA-East project. The staff wanted to understand how important strong motion events were handled in the processing. After the discussion, it was determined that no formal follow-up was needed on this topic.

After EPRI presented both slide presentations and addressed the staff questions, the NRC staff stated that considering the answers provided, the staff was still on track to provide a letter in response to the GMM Review Project Final Report by August 30, 2013.

The staff then discussed the expected format for partial hazard submittals scheduled for delivery in September 2013. The staff reiterated that the submittals should include the site response (item 3a) and the base case shear wave velocity profile (item 3b) identified in section 4 of the "Seismic Evaluation Guidance; Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic" report.⁷ The staff explained that they were only expecting a few short paragraphs and tables to provide this information.

The staff then discussed plans to provide a detailed example of the full hazard submittal due in March 2014. The intention of the example is to clarify the information the staff needs to complete their review and ensure the submittals are delivered complete. The staff offered to provide the example in the next few weeks, so that it could be discussed during the next public meeting.

Next, the staff discussed the use of individual plant examination of external events (IPEEE) for additional screening and emphasized that licensees should be following the guidance provided in the SPID with respect to the use of IPEEE for screening.

6 The slides presented by EPRI are available in ADAMS under Accession No. ML13225A234 and ML13225A245.
7 The SPID report is available in ADAMS under Accession no. ML12333A168.

The staff then presented proposed topics for the next planned meeting. The topics included:

- Use for method 2 site response – the staff will develop a few items for clarification when using method 2 and present this information at the next meeting.
- EPRI High Frequency Test program – the staff requested that EPRI present a status update on the test program, the responsible EPRI representative agreed.
- March Hazard Submittal Example – the staff will walk through the example they are preparing of a full hazard submittal to help ensure industry understands the staff expectations for these submittals.
- Relay Chatter and IPEEE – The staff will further discuss the issue of relay chatter evaluation in IPEEE.

Finally, the meeting discussion addressed the date for the next planned meeting. A tentative date of August 29th has been suggested, and both NRC and industry have to confirm availability of key staff for this date. The NRC and industry participants did agree that the next meeting could be conducted using conference and webinar information, and did not require key staff to be available to attend in-person.

There were a number of questions from the public.

The first question was whether the monitored structures being discussed included spent fuel pools. The staff clarified that the monitored structures being discussed were United States Geological Survey field instrumentation not related to nuclear facilities.

The second question was related to the intersection of the GMM update report and housing for FLEX equipment. The staff referred to the guidance in “NEI 12-06: Diverse and Flexible Coping Strategies (FLEX) Implementation Guide”⁸ and the “Seismic Evaluation Guidance; Augmented Approach for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic”⁹ which discussed seismic requirements for housing FLEX equipment.

A member of the public expressed concern about how seismic models could be developed if seismic data isn’t collected and used from nuclear facilities and expressed concern that nuclear power plants are not required to be instrumented with modern seismic data collection equipment.

Enclosure:
Participant list

8 This document is available in ADAMS under Accession No. ML12242A378.
9 This document is available in ADAMS under Accession No. ML13106A331

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*Concurrence via e-mail

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DATE	8/15/2013	8/15/2013	8/16/2013	8/16/2013

OFFICIAL RECORD COPY

Public Conference Call to Discuss the EPRI GMM Update Project

Wednesday June 5, 2013

Participant List

Name:	Organization:
Scott Flanders	U.S. Nuclear Regulatory Commission (NRC)
Nilesh Chokshi	NRC
Kamal Manoly	NRC
Yong Li	NRC
Stephanie Devlin	NRC
Sarah Tabatabai	NRC
Dogan Seber	NRC
Thomas Weaver	NRC
Jon Ake	NRC
Vladimir Graizer	NRC
Clifford Munson	NRC
Michelle Flanagan	NRC
Scott Burnell	NRC
Brittain Hill	NRC
Alice Stieve	NRC
Taekmo Shim	NRC
Siva Lingam	NRC
Lawrence Salomone	Electric Power Research Institute (EPRI) – Consultant
Kimberly Keithline	Nuclear Energy Institute
Bob Whorton	Southern California Electric and Gas
Gabriel R. Toro	Lettis Consultants International
John Richards	EPRI
Bob Youngs	AMEC E&I
Robin McGuire	Lettis Consultants International
Gina Symons	Constellation Energy
Tim Solberg	Wolf Creek Nuclear Operating Corporation
Ray Burski	Florida Power & Light Company
Jana Bergman	Scientech
Steve McDuffie	U.S. Department of Energy
Donna Pletch	Virginia Department of Emergency Management
Michael Hall	DTE Energy
Norman Simms	Duke Energy
Michael Mudlock	Simpson Gumpertz & Heger
Steve Casadevall	ASCO Valve, Inc
Michel Lee	PHASE
Wei Zheng	Black and Veatch
Diane Yeager	Leggette, Brashears & Graham
Erica Gray	Public Citizen

Enclosure

DRAFT