



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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June 22, 2022

MEMORANDUM TO: Laurel Bauer, Acting Chief
External Hazards Branch
Division of Engineering and External Hazards
Office of Nuclear Reactor Regulation

FROM: Jenise Thompson, Geologist /RA/
External Hazards Branch
Division of Engineering and External Hazards
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MAY 17, 2022, PUBLIC MEETING TO DISCUSS THE
EVALUATION OF NEW SEISMIC MODELS WITHIN THE PROCESS
FOR THE ONGOING ASSESSMENT OF NATURAL HAZARDS
INFORMATION FRAMEWORK

On May 17, 2022, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with stakeholders to discuss the evaluation of new seismic models as part of the process for ongoing assessment of natural hazard information (POANHI). The meeting notice is available in the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. ML22131A035, and the presentation slides are available at ADAMS Accession No. ML22132A299. The enclosure to this summary provides the attendees for the meeting as captured by Microsoft Teams.

The purpose of this meeting was to discuss the staff's evaluation of new seismic models, including NGA-East, within the POANHI framework. The staff presented the status of the project, plans for prioritization and screening criteria for plant-specific re-evaluations and a revised schedule for future activities and public interactions. This meeting was the first in a series of public meetings that will be held on this topic with subsequent meetings scheduled for late summer 2022 and early winter 2022.

Meeting Highlights

The meeting included a staff presentation and subsequent discussion of the following topics:

- Background on recent seismic work including NGA-East, RIL-2021-15, and NUREG/KM-0017, all of which are informing the ongoing evaluation of seismic hazards at operating reactors
- Status of project and an example site for which the staff completed the evaluation
- Plans for prioritization and screening criteria for plant-specific evaluations
- Revised project schedule including future public meetings
- Process by which stakeholders can submit comments and feedback to the staff throughout the project

POANHI Framework

Several questions were asked pertaining to the POANHI framework, how information is received and when information is entered into the framework. The staff clarified that the information for this seismic project comes from several sources and projects that were undertaken outside of the POANHI framework, including GI-199, the NGA-East project, RIL 2021-15, and the seismic reevaluations performed in response to Recommendation 2.1, as documented in NUREG/KM-0017. The staff also clarified that each of these information sources are separate from the POANHI framework and referred to NRR Office Instruction LIC-208 for an explanation of how the information enters the framework. The staff also clarified that the impact of new information on the approved licensing basis will be considered in conjunction with 10 CFR 50.69.

Prioritization and Screening

Meeting attendees asked several questions related to the prioritization and screening processes. The NRC staff clarified that the prioritization is taking a risk-informed approach by looking for the highest hazard changes based on the new information and using the site adjustment factors from the NUREG/KM-0017 to highlight the differences. The staff is still working through the prioritization, which takes about ten days per site to analyze.

For screening, the staff is comparing the updated hazard results to the previous hazard submitted by licensees in response to the NTTF Request 2.1 and the hazard updates provided in NUREG/KM-0017. The current evaluation of the hazard information will incorporate the NGA-East ground motion model as well as the lessons-learned from the NRC sponsored site response analysis study (RIL2021-15). Once the hazard results are complete for each of the plant sites the NRC staff will combine the hazard curves with estimates of the plant seismic fragility to determine the change in seismic risk. In addition to the change in seismic risk, the NRC staff will also consider other site- and plant-specific factors. As such, screening will not be solely based on numerical criteria, but will consider all information on the hazard and risk.

Other Technical Questions

Multiple participants asked the staff several more detailed technical questions, including whether the staff would consider seismic modifications implemented by licensees in response to recent NTTF Recommendation 2.1 SPRA efforts and the staff indicated that they would be open to receiving that information and will specifically look at the dominant risk contributors for potential impacts from the new hazard in considering future actions.

Feedback and Future Communications

The staff received several suggestions to improve communications on this project and to allow stakeholders to provide feedback. The NRC staff shared that a dedicated resource box (POANHI.Seismic@nrc.gov) is available to receive any comments or feedback in the period between public meetings. The staff also noted that this resource box can be used to provide any comments on the content of NUREG/KM-0017. Furthermore, the NRC staff clarified that they would consider additional public meetings, if warranted, based on the project progress or comments received. The NRC staff are also looking into different options to share comments received and will provide additional information at a later date. The staff also clarified that stakeholders using the email option will receive a confirmation email but that

responses to individual comments will vary depending on the content of the email and stage of the process. The staff also acknowledges that plant-specific discussions may be needed at some point but will try to keep public meetings more generic with wider applicability to minimize resource burdens on industry and NRC staff.

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ADAMS Accession Number: ML22164A884 *via email

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Name	JThompson*	CMunson*	LBauer*
Date	06/13/2022	06/22/2022	06/22/2022

Official Record Copy

May 17, 2022, Public Meeting to Discuss Evaluation of New Seismic Models

Attendance List*

<u>Name</u>	<u>Affiliation</u>	<u>Name</u>	<u>Affiliation</u>
Matthew Degonish	Ameren (Callaway)	Jenise Thompson	NRC
Jamey Turner	BGC Engineering	Ed Miller	NRC
Philip Tarpinian Jr	Constellation Nuclear	Clifford Munson	NRC
Michael Joseph McDonald	Constellation Nuclear	Scott Stovall	NRC
Rob Burg	Engineering Planning and Management (EPM), Inc.	Dogan Seber	NRC
Rob Choromokos	EPRI	David Heeszal	NRC
John Richards	EPRI	Laurel Bauer	NRC
Vince Andersen	Jensen Hughes, Constellation Risk Management Team	Thomas Weaver	NRC
Brian Song	Kairos Power	Shilp Vasavada	NRC
Hadi Razavi	Kairos Power	Sunwoo Park	NRC
Gabriel Toro	Lettis Consultants, International	Eric Benner	NRC
Frances Pimentel	NEI	Alex Collier	NRC
Thomas Basso	NEI	Weijun Wang	NRC
Brett Titus	NEI	Rasool AnooShehpoor	NRC
Jennifer Uhle	NEI	Kevin Quinlan	NRC
Nozar Jahangir	PG&E	Jose Pires	NRC
Dennis Schumaker	PSEG	Se-Kwon Jung	Not available (NA)
Gary DeMoss	PSEG – Salem & Hope Creek	Larry Lee	NA
Mohamed M. Talaat	Simpson, Gumpertz & Heger	Antonio Fernandez	NA
Gregory S. Hardy	Simpson Gumpertz & Heger	Deborah A Luchsinger	NA
Rachel A. Christian	Westinghouse	Jeffrey Bachhuber	NA
Jill Monahan	Westinghouse	Eric A Schindelbeck	NA
Raymond C. Wang	X-Energy	Justin W Hiller	NA
Luke McSweeney	X-Energy	Vish Patel	NA
Melanie H. Brown	NA	Ricardo E. Rodriguez	NA
Wayne Massie	NA	Brian Burgio	NA
Victoria Anderson	NA	Stephen Vaughn	NA
Robin McGuire	NA	De Wu	NA

Shahin Seyedhosseini	NA	Mark Zellman	NA
Steven Alferink	NA	Joe Vasquez	NA
Kaven Liu	NA	Fernando Ferrante	NA
Robert I Rishel	NA	Andrew Mauer	NA
Jinsuo Nie	NA	Mory Diané	NA
Richard Stadlander	NA		

*Attendance list based on Microsoft Teams Participant list. List does not include 9 individuals that connected via phone.