

**ANDREW N. MAUER**  
*Senior Project Manager, Risk Assessment*

1201 F Street, NW, Suite 1100  
Washington, DC 20004  
P: 202.739.8018  
anm@nei.org  
nei.org



January 31, 2017

Mr. Michael Franovich  
Director, Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject:** Request for Endorsement of *Seismic Evaluation Guidance: Spent Fuel Pool Integrity Evaluation (EPRI 3002009564)*

**Project Number: 689**

Dear Mr. Franovich:

This letter provides a link to the *Seismic Evaluation Guidance: Spent Fuel Pool Integrity Evaluation (EPRI 3002009564)* for U.S. Nuclear Regulatory Commission (NRC) review and endorsement. The NRC-endorsed *Seismic Evaluation Guidance: Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic (EPRI 1025287)* provides guidance for conducting seismic evaluations as requested in Enclosure 1 of the NRC's March 12, 2012 50.54(f) letter, which requested that licensees and holders of construction permits under 10 CFR Part 50 reevaluate the seismic hazards at their sites against present-day NRC requirements and guidance.

EPRI 1025287 provided guidance for conducting seismic evaluations, including those requested in the NRC's letter, which asks that plants reevaluate the seismic hazards at their sites against present-day NRC requirements and guidance. Section 7 of EPRI 1025287 provides guidance for performing an evaluation of the spent fuel pool (SFP) that considers all seismically induced failures that can lead to draining of the SFP.

The evaluations provided in EPRI 3002009564 supplement the SFP evaluation guidance in EPRI 1025287 and show that SFPs can retain adequate water inventory for 72 hours provided the plant meets a limited set of parameters. This report provides SFP seismic evaluation guidance for the structural and non-structural aspects of SFP integrity. Separate guidance is provided for plants in which the ground motion response spectrum (GMRS) peak spectral acceleration is less than or equal to 0.8g, and for plants in which the GMRS peak spectral acceleration is greater than 0.8g. A key conclusion of the report is that the seismic induced SFP inventory losses are modest and that the majority of inventory losses over 72 hours are due to boil off.

Mr. Michael Franovich

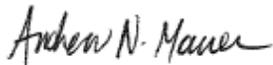
January 31, 2017

Page 2

This report provides criteria, which will enable plants to confirm that their plant parameters are enveloped by those considered in this evaluation. Based upon the NRC letter to power reactor licensees dated October 27, 2015, the plants required to perform a spent fuel pool evaluation which have a GMRS peak spectral acceleration  $>0.8g$ , will submit a response consistent with Section 4.3 of EPRI 3002009564 by December 31, 2017.

Please utilize the following link to retrieve the [report](#). If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Andrew N. Mauer". The signature is written in a cursive style.

Andrew N. Mauer

c: Gregory Bowman, NRR/JLD/PPSD/HMB, NRC