




UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 5, 2018

MEMORANDUM TO: Michael T. Markley, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

FROM: G. Edward Miller, Project Manager  
Special Projects and Process Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation 

SUBJECT: SUMMARY OF JANUARY 18, 2018, PUBLIC MEETING WITH  
NUCLEAR ENERGY INSTITUTE REGARDING 10 CFR 50.69  
LICENSE AMENDMENT REQUESTS

On January 18, 2018, a Category 2 public meeting<sup>1</sup> was held between representatives of the U.S. Nuclear Regulatory Commission (NRC), Nuclear Energy Institute (NEI), Electric Power Research Institute (EPRI), and other licensees. The purpose of the meeting was to discuss NEI's model license amendment request (LAR) to implement a risk-informed program for categorization and treatment of structures, systems, and components (SSCs) for nuclear power reactors in accordance with Section 50.69, "Risk-informed categorization and treatment of structures, systems, and components for nuclear power reactors," of Title 10 of the *Code of Federal Regulations* (10 CFR 50.69). This public meeting was a continuation of public meetings held on August 18, 2016,<sup>2</sup> and January 25,<sup>3</sup> June 21,<sup>4</sup> September 6,<sup>5</sup> and October 23, 2017,<sup>6</sup> on the same topic. The meeting focused on augmentations to the NEI template to address lessons learned from those submittals currently under review. Additionally, this meeting covered potential approaches to implementing 10 CFR 50.69 when a licensee did not have seismic probabilistic risk assessment (SPRA) or a seismic margins analysis.

The NRC staff presented slides<sup>7</sup> regarding feedback and suggestions based on submittals currently under review. In summary, the slides provided the following feedback:

- The LARs need to include a categorization process summary description;
- Regulatory Guide 1.200 probabilistic risk assessment (PRA) quality guidelines apply;

<sup>1</sup> The meeting notice and agenda are available in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML17353A016.

<sup>2</sup> The meeting summary for the August 18, 2016, meeting is available under ADAMS Accession No. ML16250A548.

<sup>3</sup> The meeting summary for the January 25, 2017, meeting is available under ADAMS Accession No. ML17027A251.

<sup>4</sup> The meeting summary for the June 21, 2017, meeting is available under ADAMS Accession No. ML17177A063.

<sup>5</sup> The meeting summary for the September 6, 2017, public meeting is available under ADAMS Accession No. ML17265A020.

<sup>6</sup> The meeting summary for the October 23, 2017, public meeting is available under ADAMS Accession No. ML17305A242.

<sup>7</sup> The NRC slides are available under ADAMS Accession No. ML18017B141.

- Deviations should be minimized;
- Methods not accepted by NRC should be avoided ;
- Consistency with NEI 00-04, Figure 5-6 (external events), should be demonstrated in the LAR;
- Inclusion of Class 1 passive component in categorization would represent an expansion beyond previously accepted methods and would complicate review;
- The NRC staff indicated that further evaluation of the impact of certain Westinghouse Nuclear Safety Advisory Letters (e.g., NSAL-00-006<sup>8</sup>) on this topic may be needed: and
- It was not clear that the rule would allow alternative treatment for Class 1 passive components beyond in-service testing.

Subsequently, NEI staff presented slides<sup>9</sup> that summarized changes to the template LAR that had been made based upon previous NRC staff feedback and lessons learned from in-house reviews. Additionally, NEI provided the current version of the template LAR.<sup>10</sup>

Subsequently, NEI staff, supported by EPRI staff, presented slides<sup>11</sup> that analyzed the value of including seismic hazards in the categorization of SSCs for sites that had high seismic hazards and had performed SPRAs. The slides indicated that in the two examples, inclusion of the SPRA did not uniquely identify any SSCs with high safety significance (i.e., all SSCs identified by the SPRA were also identified as high safety significance by another model such as the fire PRA). A third example was provided which identified 5 components high safety significant that were not identified by another categorization process. The conclusion of the analysis asserted that explicit consideration of seismic risks in the categorization process was not necessary and proposed a 3-tiered approach for seismic categorization that they plan to finalize after a 4<sup>th</sup> plant model is completed. They indicated their intent to present these results at a subsequent public meeting.

The NRC staff indicated that such an approach to the seismic aspect of 10 CFR 50.69 applications may be feasible, but indicated that it would be a deviation from the currently endorsed guidance. Similar to the prior meeting on this topic, the NRC staff indicated that although not an exhaustive list, if such an approach was pursued, the following would need to be addressed:

- Justification for how the studies presented can be generalized to be applicable for the remainder of the fleet
- Justification of any changes needed to address the impact on the categorization process:
  - Integrated importance assessment
  - Additional information that may need to be provided to the integrated decision-making panel
- Specific entry conditions of usage for the analysis such as:
  - Magnitude and spectrum of the site-specific seismic hazard
  - Containment type
  - Component limitations
  - Estimated seismic risk

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<sup>8</sup> NSAL-00-006 is available under ADAMS Accession No. ML091190189.

<sup>9</sup> The NEI slides are available under ADAMS Accession No. ML18022A113.

<sup>10</sup> The version of the template LAR provided is available under ADAMS Accession No. ML18022A112.

<sup>11</sup> The NEI slides (prepared by EPRI) are available under ADAMS Accession No. ML18022A111.

- Relevance of the Near Term Task Force (NTTF) 2.1 categorization process to differentiating between “medium” and “high” seismic sites

The feedback provided by the NRC staff is not all-inclusive and it is possible that additional questions could arise during an actual review where this concept is applied.

No regulatory decisions were made and both the NRC staff and the NEI indicated that they would consider the items discussed in the meeting.

Following the discussion, an opportunity was afforded to any other participants who wished to ask questions or make comments. No questions or comments were received.

The list of attendees is enclosed to this summary.

Enclosure:  
List of Attendees

**ENCLOSURE**  
**LIST OF ATTENDEES**

# Sign In Sheet

Public Meeting With NEI to  
Discuss 50.69 and Seismic  
Approaches

DATE: Jan 18, 2018

Name	Organization
Ray C. Anthony	PNW OG
Lynne Gunderson	ENERCON for Energy NW
Shannon Rafferty-Ginzica	Exelon
HEATHER STEWIS	DUKE ENERGY
RUSS FELTS	NRC
Guy Hardy	SGH
GREG KRUEGER	NEI
THOMAS ZACHARIAH	NEI
Paul Amico	JENSEN HUGHES
Phil Tarpinian	EXELON
Bob Wolfgang	NRC
Jana Bergman	CURTISS-WRIGHT
Kaihwa HSU	NRC
Adrienne Driver	NRC
VIA PHONE	
BOB POST	DOMINION
TOMMY JOHN	↓
ALLEN MOLDENHAUER	
BILL WEBSTER	
ROCKY KREIDER	EPM
TOM HESS	TVA
COURTNEY ST. PETERS	NRC
JOHN CONLY	CERTREC
MING LI	NRC

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# Sign In Sheet

DATE: Jan 18, 2018

Public Meeting With NEI to  
Discuss 50.69 and Seismic  
Approaches

Name	Organization
Ed Miller	NRC/NRR/DORL
Leslie Fields	NRC/NRR/DRA
JOHN STAMATILOS	CHINA/SIARI
KAMAL MANOLY	
Michael Markley	NRC/DORL
Mike Franovich	NRC/NRR/DRA
Stacey Rosenbergl	NRC/NRR/DRA
STEPHEN DINSMORE	NRC/NRR/DRA
MIHAELA BIRO	NRC/NRR/DRA
GARY DEMOSS	PSEG
BRET TEGELER	JENSEN HUGHES
GENE KELLY	EXELON
SARA LYONS	NRC/NRR/DRA
Michael Levine	NRC/NRR/DRA
Brandon Hartle	NRC-NRR-DRA
Pat O'Regan	EPRI
<del>Pat O'Regan</del>	<del>EPRI</del>
VIA PHONE	
STEPHEN KIMBROUGH	DUKE
VIJAY MEGHANI	NRC
JAMES NEURAVTEN	NRC

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SUBJECT: SUMMARY OF OCTOBER 23, 2017, PUBLIC MEETING WITH NUCLEAR ENERGY INSTITUTE REGARDING 10 CFR 50.69 LICENSE AMENDMENT REQUESTS DATED FEBRUARY 5, 2018

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- MBiro, NRR
- SDinsmore, NRR
- SRosenberg, NRR
- TWertz, NRR

**ADAMS Accession No. ML18025B737**

**\*via e-mail**

OFFICE	NRR/DORL/LSPB/PM	NRR/DORL/LSPB/LA	NRR/DRA/APLA/BC
NAME	GEMiller	JBurkhardt	SRosenberg
DATE	2/1/2018	1/29/18	2/1/2018
OFFICE	NRR/DORL/LPL2-1/BC	NRR/DORL/LSPB/PM	
NAME	MMarkley	GEMiller	
DATE	2/5/2018	2/5/2018	

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