

February 18, 2015

MEMORANDUM TO: Hossein G. Hamzehee, Chief  
PRA Licensing Branch  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

FROM: Mehdi Reisi Fard, Reliability and Risk Analyst /RA/  
PRA Licensing Branch  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JANUARY 29, 2015 CATEGORY 2 MEETING  
REGARDING FIRE PROBABILISTIC RISK ASSESSMENT  
METHODS AND FREQUENTLY ASKED QUESTIONS

On January 29, 2015, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 2 public meeting, via teleconferencing, with the nuclear industry and the Nuclear Energy Institute (NEI) to discuss fire probabilistic risk assessment (FPRA) Frequently Asked Questions (FAQs). Prior to this meeting, the NRC staff provided comments on Revision E of FPRA FAQ 14-0009, "Treatment of Well-Sealed MCC Electrical Panels Greater than 440V," (available at Agencywide Documents Access and Management System (ADAMS) Accession No. ML14342A577) and NRC position on probability of breaching well sealed MCCs of 440V or greater (ADAMS Accession No. ML15023A064).

A summary of the topics discussed at this meeting is provided below:

- The NRC staff provided a brief status of interactions between the NRC and the industry on FPRA FAQ 14-0009. The staff briefly explained the comments that were provided in two documents after the last FPRA public meeting. The comments in the first document constraint the scope of the FPRA FAQ to well-sealed MCCs. The second document provides probability of breaching well-sealed MCCs using data from the updated database in NUREG-2169/EPRI 3002002936, "Nuclear Power Plant Fire Ignition Frequency and Non-Suppression Probability Estimation Using the Updated Fire Events Database," December 2014. Industry believed that the new analysis by the NRC

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needed to be reviewed by a method review panel. The NRC staff stated that the review panel needs to be sensitive about the timeline as resolution of this FAQ is needed for completing the ongoing reviews. The Office of Nuclear Regulatory Research (RES) will work with Electric Power Research Institute (EPRI) to form a review panel and complete an expeditious review of the NRC data and conclusion regarding the probability of breaching well-sealed MCCs used to support FPRA FAQ 14-0009. Industry agreed to complete a finalized draft of FPRA FAQ 14-0009 by incorporating NRC comments provided in two documents sent after the November meeting.

- The NRC staff briefly stated that as industry had expressed interest in resolving FPRA FAQ 14-0007, "Transient Fire Frequency Likelihood," the NRC staff looked at the first draft and held internal discussions. Although the NRC staff has developed early comments because of complexity, the staff has determined that more time is needed to review the issue. The NRC staff will discuss the path forward and timeline for FPRA FAQ 14-0007 in the next meeting. Industry indicated that several licensees would use this FAQ in their risk-informed Technical Specifications Initiative 4b applications.
- The NRC discussed the status of work on freeze point paper. The staff stated that finalizing the freeze point paper would require additional resources. In addition, the industry is already using this concept and the NRC will review the applications that utilize this concept on a case-by-case basis. The NRC staff will revisit this work in June or July to determine whether the resources are available for continuing the work on the paper.
- The NRC staff from RES provided a status update on research activities. RES staff indicated that the report on electrical cabinet heat release rate research has been provided to the Office of Nuclear Reactor Regulation (NRR). In addition, the status of the work on incipient detection was provided. Finally, NRC staff noted that the new data on fire ignition frequency and non-suppression probability has become available in NUREG-2169/EPRI 3002002936. The NRC staff will provide the plan on implementation of this NUREG in the next FPRA FAQ meeting.

Meeting notice and agenda for this public meeting is available at ADAMS Accession No. ML14345A176.

A list of meeting attendees is enclosed with this memorandum.

Enclosure:  
As stated

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| OFFICE | NRR/DRA/APLA  | NRR/DRA/APLA |
| NAME   | MReisiFard    | HHamzehee    |
| DATE   | 2 / 10 / 2015 | 2/18/2015    |

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**FIRE PROBABILISTIC RISK ASSESSMENT  
FREQUENTLY ASKED QUESTIONS PROCESS**

**LIST OF ATTENDEES**

January 29, 2015

**U. S. Nuclear Regulatory Commission Staff**

J. Giitter  
S. Lee  
H. Hamzehee  
A. Klein  
M. Salley  
S. Dinsmore  
D. Gennardo  
J. Hyslop  
N. Iqbal  
P. Lee  
N. Melly  
B. Metzger  
M. Reisi Fard

**Stakeholders**

P. Amico (Hughes Associates)\*  
V. Anderson (Nuclear Energy Institute)\*  
J. Chapman (Sciencetech Nuclear Division Curtiss-Wright)\*  
F. DePeralta (Pacific Northwest National Laboratory)  
F. Joglar (Hughes Associates)\*  
R. Kalantari (Engineering Planning and Management (EPM), Inc.)\*  
C. LaFleur (Sandia National Laboratories)\*  
J. Liming (ABSG Consulting Inc.)\*  
A. Linedman (Electric Power Research Institute)\*  
D. Miskiewicz (Engineering Planning and Management (EPM), Inc.)\*  
B. Najafi, (SAIC)\*  
P. Phan (Appendix R Solutions, Inc.)\*  
A. Ratchford (RDS)\*  
M. Schairer (Engineering Planning and Management, Inc.)\*  
J. Stone (Exelon)\*  
K. Zee (ERIN Engineering and Research, Inc.)\*

\*participated via phone

ENCLOSURE