

October 5, 2007

MEMORANDUM TO: Alex Klein, Acting Chief  
Fire Protection Branch  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

FROM: Edward V. McCann, Fire Protection Engineer */RA/*  
Fire Protection Branch  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF SEPTEMBER 6, 2007, PUBLIC MEETING TO DISCUSS  
FIRE-INDUCED MULTIPLE SPURIOUS CIRCUIT ACTUATIONS

On September 6, 2007, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 3 public meeting with stakeholders to discuss Nuclear Energy Institute's (NEI's) detailed method to address fire-induced multiple spurious actuations (MSAs). See meeting notice and agenda in Agencywide Documents Access and Management System (ADAMS) Accession No. ML072340678. An attendance list is provided in Enclosure 1.

The objective of the meeting was to engage in dialogue with stakeholders on NEI's/Industry's detailed methodology to resolve the MSA issue. NRC slides are included in Enclosure 2.

NEI/Industry proposed updating NEI 00-01 "Guidance for Post-Fire Safe Shutdown Circuit Analysis" to include a detailed technical methodology for resolving fire-induced multiple spurious actuations that included a "focused" scope fire probabilistic risk assessment (PRA) to evaluate scenarios with potential risk significance. The proposed methodology is shown in the NEI slides, Enclosure 3.

NEI/Industry stated that the "focused" scope fire PRA would require portions of a full fire PRA to be performed, such as ignition source counting, and fire modeling. NEI/Industry also indicated that where "focused" scope fire PRAs would be performed the analysis would be done in a manner consistent with the American Nuclear Society fire PRA standard. They indicated that the cost of this "focused" scope fire PRA to resolve the MSA issue could be as much as half of the cost of performing a full fire PRA. NEI/Industry did not present a regulatory framework in which to apply this method. NRC staff indicated that both the technical aspects and regulatory concerns should be addressed concurrently.

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During this meeting the NRC staff reaffirmed that adoption of 10CFR50.48(c) - National Fire Protection Association (NFPA) Standard 805 is the preferred method for utilizing a risk-informed, performance-based approach to address MSAs.

During the meeting, the NRC staff reaffirmed that the proposed methodology should also resolve the fire-induced circuits resolution 10 CFR Part 50, Appendix R, section III.G.3 (alternative or dedicated shutdown) issues, as well as III.G.2 issues. However, NRC staff recognized that for III.G.3 areas, such as the control rooms, simplified methods will be more complex but the NRC staff also emphasized our interest to work with the industry and stakeholders on this. Staff requested NEI to develop a plan that addresses MSA concerns in all III.G.3 areas.

NEI staff stated they would look into five items following the meeting to share with the NRC staff: 1) provide background on the NEI 04-06 "Guidance for Self-Assessment of Circuit Failure Issues" pilot, 2) determine the extent that plants will use "focused-scope" fire PRA compared to full scope fire PRAs, 3) the use of Regulatory Guide 1.174 principles for exemption requests, 4) share resources and timeline to update NEI 00-01 with this methodology, and 5) provide more information on how many plants use III.G.3 criteria in areas that are typically characterized as III.G.2 areas.

Enclosures:  
As stated

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Enclosures:  
As stated

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OFFICE	NRR/DRA/AFP	NRR/DRA/AFP	NRR/DRA/AFP
NAME	Ed McCann	Alex Klein	Dan Frumkin
DATE	10/ 04 /07	10/ 05 /07	10/ 02 /07

**OFFICIAL AGENCY RECORD**

**PUBLIC MEETING TO SOLICIT INPUT FOR DEVELOPMENT OF HIGH-LEVEL PLAN FOR  
CLOSURE OF THE MULTIPLE SPURIOUS CIRCUIT ACTUATIONS ISSUE  
LIST OF ATTENDEES  
September 06, 2007**

**NRC**

A. Klein	P. Qualls
C. Moulton	E. McCann
R. Gallucci	P. Barbadoro
H. Barrett	R. Woods
J. Grobe	D. Frumkin
G. Taylor	J. Dreisbach
T. Dinh	B. Correll*

**OTHER**

A. Marion (NEI)	D. Finnicum (W)
E. Heacock * (STP)	A. Ratchford (MSN)
J. Lattner * (Southern Nuclear)	J. Riley (NEI)
N. Chapman * (SERCH/Bechtel)	J. Suter *(WCNOC)
A. Afzali *(Diablo Canyon)	T. Gorman (BWROG/PPL)
M. Richardsen * (Diablo Canyon)	B. Bradley (NEI)
S. Hardy (Progress Energy)	W. Larson * (EPM)
M. Heatherly (TVA)	M. Taylor (Exelon)
G. Cooper *(Constellation)	D. Henneke (GE)
K. Taplett *(STP)	R. Kalantari * (EPM)
D. Raleigh (Scientech, LLC)	

\* participated via phone