

December 16, 2013

Mr. Biff Bradley  
Director, Risk Assessment  
Nuclear Energy Institute  
1201 F St., NW, Suite 1100  
Washington, DC 20004-1218

SUBJECT: INTERIM TECHNICAL GUIDANCE ON FIRE-INDUCED CIRCUIT FAILURE  
MODE LIKELIHOOD ANALYSIS

Dear Mr. Bradley:

The Office of Nuclear Regulatory Research (RES) completed an interim technical guidance on Fire-Induced Circuit Failure Mode Likelihood Analysis in June 2013 (Agencywide Documents Access and Management System Accession Number ML13165A209). Enclosed is a copy of this interim guidance (ADAMS Accession No. ML13165A214). This document provides interim technical guidance, in a manner similar to that in NUREG/CR-6850, "EPRI/NRC Fire PRA Methodology for Nuclear Power Facilities," for the treatment of circuit failure mode probability estimates. This interim guidance is based on the recent work of the NRC and Electric Power Research Institute Fire Probabilistic Risk Analysis (PRA) Expert Elicitation panel. Several representatives from the nuclear industry were co-members of this panel. The interim guidance is based on the latest information developed by the expert panel and is not expected to change when finalized.

The final results of the PRA Expert Elicitation project are expected to be published in Volume 2 of NUREG/CR-7150 in 2014, and will support a future update to the methodology in NUREG/CR-6850. The results are expected to be consistent with this interim guidance. However, Volume 2 of the report is expected to provide additional refinement to the methods for quantifying fire-induced cable damage. This Interim Technical Guidance serves as an NRC staff position on fire-induced circuit failure mode likelihood analysis until Volume 2 is published and endorsed.

We welcome further dialogue to enhance analytical methods for use in fire PRA regulatory applications. If you have any questions, please feel free to contact Hossein Hamzehee at (301) 415-0562.

Sincerely,

*/RA/*

Joseph G. Giitter, Director  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

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ENCLOSURE

INTERIM TECHNICAL GUIDANCE ON FIRE-INDUCED CIRCUIT FAILURE MODE  
LIKELIHOOD ANALYSIS

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