

June 27, 2007

Mr. Alexander Marion, Executive Director
Nuclear Operations and Engineering
Nuclear Generation Division
Nuclear Energy Institute
1776 I Street, NW, Suite 400
Washington, D.C. 20006

Dear Mr. Marion:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I thank you for participating in the NRC staff efforts to develop or endorse guidelines that provide a clearly defined method of compliance for circuit issues for licensees who do not choose to utilize the risk-informed, performance-based approach contained in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.48(c).

BACKGROUND

You first presented a framework for a methodology to resolve fire-induced circuit issues at a public meeting that NRC held on February 16, 2007, (Agency wide Documents Access and Management System (ADAMS) Accession No. ML070590448). You also requested that NRC provide feedback before the industry expends resources to develop the proposed methodology. In response, the NRC provided feedback on the framework you proposed in a memorandum dated March 23, 2007, (ADAMS Accession No. ML070750153). That memorandum stated several staff concerns with respect to your proposed framework and posed several questions pertaining to high-level attributes of the proposed framework.

On April 24, 2007, the staff held another public meeting to discuss the staff's letter dated March 23, 2007, (ADAMS Accession No. ML071520103). Subsequently, on May 15, 2007, you replied to NRC's letter and provided responses to the NRC's questions. The NRC staff has reviewed your responses and has the following views about the framework that you have proposed.

STAFF VIEWS

The NRC staff considers some of the attributes in your approach as positive. The use of the Owners Groups to determine generic lists of multiple spurious operations, and the application of expert panels at the plant level are significant, positive efforts to simplify the approach. Both of these efforts will provide additional consideration of issues to ensure the approach is inclusive of all functions impacted by multiple spurious actuations and maloperations.

The NRC staff's concern continues to be the method to utilize risk insights, using Nuclear Energy Institute (NEI) 00-01, Chapter 4 with fire modeling, to screen out and resolve noncompliances with 10 CFR 50, Appendix R.

- The approach you have proposed allows the use of internal events probabilistic risk assessments (PRAs), and fire PRAs that may not be of appropriate quality to screen out sequences. Due to the limited applicability of internal events PRAs and the questionable quality of fire PRAs, some of these screened sequences may represent safety concerns due to synergistic effects of non-compliances with (a) multiple circuit issues, (b) operator manual actions, or (c) multiple circuit issues and operator manual actions.
- In our letter dated March 23, 2007, the NRC staff reaffirmed that adoption of NFPA Standard 805 is the method for utilizing a risk-informed, performance-based approach to address the issue of multiple spurious operations, permitted in 10 CFR 50.48(c). The framework that you provide continues to include considerations of risk in determining compliance outside of 10 CFR 50.48(c).
- In our letter to you dated March 23, 2007, the NRC staff advised you that based on our review of the proposed framework; it is not consistent with the regulatory requirements of 10 CFR 50.48(a) and (b), and 10 CFR 50, Appendix R, Section III.G. Therefore, plants licensed to operate before January 1, 1979, who wish to use the NEI methodology as currently described, must submit a request for an exemption from compliance with Section III.G of Appendix R, in accordance with the requirements of 10 CFR 50.12, in those areas where risk considerations are utilized to resolve non-compliances. Your letter dated May 15, 2007, did not address this issue.

The NRC is interested in working with you to resolve the issues and finalize a methodology that provides a framework to establish compliance with 10 CFR 50.48(a) and (b) which can be used by licensees who do not wish to adopt NFPA 805 and apply risk methods using fire PRA models that meet NRC's PRA Quality standards. The NRC staff looks forward to meeting with you on June 29 and continuing to work on a methodology that we can endorse.

Sincerely,

/RA/

John A. Grobe, Associate Director
for Engineering and Safety Systems
Office of Nuclear Reactor Regulation

- The approach you have proposed allows the use of internal events probabilistic risk assessments (PRAs), and fire PRAs that may not be of appropriate quality to screen out sequences. Due to the limited applicability of internal events PRAs and the questionable quality of fire PRAs, some of these screened sequences may represent safety concerns due to synergistic effects of non-compliances with (a) multiple circuit issues, (b) operator manual actions, or (c) multiple circuit issues and operator manual actions.
- In our letter dated March 23, 2007, the NRC staff reaffirmed that adoption of NFPA Standard 805 is the method for utilizing a risk-informed, performance-based approach to address the issue of multiple spurious operations, permitted in 10 CFR 50.48(c). The framework that you provide continues to include considerations of risk in determining compliance outside of 10 CFR 50.48(c).
- In our letter to you dated March 23, 2007, the NRC staff advised you that based on our review of the proposed framework; it is not consistent with the regulatory requirements of 10 CFR 50.48(a) and (b), and 10 CFR 50, Appendix R, Section III.G. Therefore, plants licensed to operate before January 1, 1979, who wish to use the NEI methodology as currently described, must submit a request for an exemption from compliance with Section III.G of Appendix R, in accordance with the requirements of 10 CFR 50.12, in those areas where risk considerations are utilized to resolve non-compliances. Your letter dated May 15, 2007, did not address this issue.

The NRC is interested in working with you to resolve the issues and finalize a methodology that provides a framework to establish compliance with 10 CFR 50.48(a) and (b) which can be used by licensees who do not wish to adopt NFPA 805 and apply risk methods using fire PRA models that meet NRC's PRA Quality standards. The NRC staff looks forward to meeting with you on June 29 and continuing to work on a methodology that we can endorse.

Sincerely,

/RA/

John A. Grobe, Associate Director
for Engineering and Safety Systems
Office of Nuclear Reactor Regulation

DISTRIBUTION:

DRA r/f

ADAMS Accession No.: ML071760199

NRR-106

OFFICE	NRR/DRA/AFP	NRR/DRA/AFP	NRR/DRA/AFP	NRR/DRA	NRR/ADES
NAME	EMcCann	AKlein	SWeerakkody	CHolden	JGrobe
DATE	06/25/07	06/25/07	06/25/07	06/25/07	06/27/07

OFFICIAL RECORD COPY