

August 10, 2006

Mr. Alexander Marion  
Nuclear Energy Institute  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708

SUBJECT: PROPOSED LICENSE RENEWAL INTERIM STAFF GUIDANCE  
LR-ISG-2006-03: STAFF GUIDANCE FOR PREPARING SEVERE ACCIDENT  
MITIGATION ALTERNATIVES (SAMA) ANALYSES

Dear Mr. Marion:

The purpose of this letter is to provide you with the opportunity to comment on the enclosed License Renewal Interim Staff Guidance LR-ISG-2006-03 (LR-ISG) for severe accident mitigation alternatives (SAMA) analyses (Enclosure). This LR-ISG recommends that applicants for license renewal use the Guidance Document NEI 05-01, Rev. A when preparing SAMA analyses. This LR-ISG is being proposed consistent with our goal to more efficiently resolve license renewal issues identified by the staff or the industry. Your response to this letter will assist the staff in deciding how to finalize and implement the license renewal interim staff guidance.

After receiving extensive requests for additional information regarding the SAMA analyses, several applicants for license renewal concluded that they did not fully understand the kind of information that the NRC staff was expecting to see in SAMA analyses. The Nuclear Energy Institute (NEI) decided to develop a generic guidance document to help clarify the NRC staff's expectations regarding the information that needs to be submitted in SAMA analyses. On April 8, 2005, the NEI submitted Guidance Document NEI 05-01, "Severe Accident Mitigation Alternatives (SAMA)." In an effort to develop a shared understanding of the staff's expectations and make the staff's reviews more efficient, the NRC staff reviewed the document. In a letter dated July 12, 2005, NRC provided comments on NEI 05-01. NRC's comments were discussed during a public license renewal meeting between NEI and NRC on July 21, 2005. The NEI subsequently submitted revisions to NEI 05-01 on December 16, 2005, and February 17, 2006. The NRC staff has concluded that the final version of Rev. A to NEI 05-01, submitted on February 17, 2006, fully resolves the NRC's comments.

Although this proposed LR-ISG does not convey a change in the NRC's regulations or how they are being interpreted, it is being provided to facilitate complete preparation of future SAMA analysis submittals in support of applications for license renewal and other license amendment applications. As such, we are interested in receiving comments on the proposed LR-ISG as well as an indication of when comments can be provided to ensure its timely release. The staff plans to incorporate this guidance into a future update of Supplement 1 to Regulatory Guide 4.2, "Preparation of Supplemental Environmental Reports for Applications To Renew Nuclear Power Plant Operating Licenses." Because this LR-ISG provides a clarification of existing guidance with no additional requirements, the staff did not perform a backfit evaluation.

A. Marion

-2-

Recent SAMA analyses submitted as part of the license renewal applications have begun to use the guidance in NEI 05-01. Use of the guidance has already led to improved quality in the submitted SAMA analyses and to a reduction in the number of requests for additional information by the NRC staff.

A notice relating to this proposed LR-ISG will be published in the *Federal Register*. The staff is requesting your comments on the proposed LR-ISG as indicated in the *Federal Register* notice. If you have any questions regarding this matter, please contact Mr. Richard L. Emch, Jr., by telephone at 301-415-1590 or by e-mail at [RLE@nrc.gov](mailto:RLE@nrc.gov).

An identical letter was sent to Mr. David Lochbaum at the Union of Concerned Scientists for comment.

Sincerely,

**/RA/ Pao-Tsin Kuo for**

Frank P. Gillespie, Director  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Project No. 690

Enclosure:  
Proposed LR-ISG-2006-03

cc w/encl: See next page

August 10, 2006

Mr. David Lochbaum  
Union of Concerned Scientists  
1707 H Street, NW, Suite 600  
Washington, DC 20006-3919

SUBJECT: PROPOSED LICENSE RENEWAL INTERIM STAFF GUIDANCE  
LR-ISG-2006-03: STAFF GUIDANCE FOR PREPARING SEVERE ACCIDENT  
MITIGATION ALTERNATIVES (SAMA) ANALYSES

Dear Mr. Lochbaum:

The purpose of this letter is to provide you with the opportunity to comment on the enclosed License Renewal Interim Staff Guidance LR-ISG-2006-03 (LR-ISG) for severe accident mitigation alternatives (SAMA) analyses (Enclosure). This LR-ISG recommends that applicants for license renewal use the Guidance Document NEI 05-01, Rev. A when preparing SAMA analyses. This LR-ISG is being proposed consistent with our goal to more efficiently resolve license renewal issues identified by the staff or the industry. Your response to this letter will assist the staff in deciding how to finalize and implement the license renewal interim staff guidance.

After receiving extensive requests for additional information regarding the SAMA analyses, several applicants for license renewal concluded that they did not fully understand the kind of information that the NRC staff was expecting to see in SAMA analyses. The Nuclear Energy Institute (NEI) decided to develop a generic guidance document to help clarify the NRC staff's expectations regarding the information that needs to be submitted in SAMA analyses. On April 8, 2005, the NEI submitted Guidance Document NEI 05-01, "Severe Accident Mitigation Alternatives (SAMA)." In an effort to develop a shared understanding of the staff's expectations and make the staff's reviews more efficient, the NRC staff reviewed the document. In a letter dated July 12, 2005, NRC provided comments on NEI 05-01. NRC's comments were discussed during a public license renewal meeting between NEI and NRC on July 21, 2005. The NEI subsequently submitted revisions to NEI 05-01 on December 16, 2005, and February 17, 2006. The NRC staff has concluded that the final version of Rev. A to NEI 05-01, submitted on February 17, 2006, fully resolves the NRC's comments.

Although this proposed LR-ISG does not convey a change in the NRC's regulations or how they are being interpreted, it is being provided to facilitate complete preparation of future SAMA analysis submittals in support of applications for license renewal and other license amendment applications. As such, we are interested in receiving comments on the proposed LR-ISG as well as an indication of when comments can be provided to ensure its timely release. The staff plans to incorporate this guidance into a future update of Supplement 1 to Regulatory Guide 4.2, "Preparation of Supplemental Environmental Reports for Applications To Renew Nuclear Power Plant Operating Licenses." Because this LR-ISG provides a clarification of existing guidance with no additional requirements, the staff did not perform a backfit evaluation.

D. Lochbaum

-2-

Recent SAMA analyses submitted as part of the license renewal applications have begun to use the guidance in NEI 05-01. Use of the guidance has already led to improved quality in the submitted SAMA analyses and to a reduction in the number of requests for additional information by the NRC staff.

A notice relating to this proposed LR-ISG will be published in the *Federal Register*. The staff is requesting your comments on the proposed LR-ISG as indicated in the *Federal Register* notice. If you have any questions regarding this matter, please contact Mr. Richard L. Emch, Jr., by telephone at 301-415-1590 or by e-mail at [RLE@nrc.gov](mailto:RLE@nrc.gov).

An identical letter was sent to Mr. Alexander Marion at the Nuclear Energy Institute for industry comment.

Sincerely,

**/RA/ Pao-Tsin Kuo for**

Frank P. Gillespie, Director  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Project No. 690

Enclosure:  
Proposed LR-ISG-2006-03

cc w/encl: See next page

D. Lochbaum

-2-

Recent SAMA analyses submitted as part of license renewal applications have begun to use the guidance in NEI 05-01. Use of the guidance has already led to improved quality in the submitted SAMA analyses and to a reduction in the number of requests for additional information by the NRC staff.

A notice relating to this proposed LR-ISG will be published in the *Federal Register*. The staff is requesting your comments on the proposed LR-ISG as indicated in the *Federal Register* notice. If you have any questions regarding this matter, please contact Mr. Richard L. Emch, Jr., by telephone at 301-415-1590 or by e-mail at [RLE@nrc.gov](mailto:RLE@nrc.gov).

An identical letter was sent to Mr. Alexander Marion at the Nuclear Energy Institute for industry comment.

Sincerely,

**/RA/ Pao-Tsin Kuo for**

Frank P. Gillespie, Director  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Project No. 690

Enclosure:  
Proposed LR-ISG-2006-03

cc w/encl: See next page

Adams Accession No. **ML062220367**

OFFICE	LA:DLR	PM:DLR:RLRB	PM:DLR:REBB	PM:DLR:REBB
NAME	Y. Edmonds	L. Tran	J. Davis	R. Emch (RGS for)
DATE	07/14/06	07/21/06	07/14 /06	07/14/06
OFFICE	OGC (NLO)	BC:DLR:REBB	BC:DLR:RLRB	D:DLR
NAME	S. Uttal	R. Franovich (Jdavis for)	J. Zimmerman	F. Gillespie
DATE	08/04/06	08/07/06	08/08/06	08/10/06

OFFICIAL RECORD COPY

Letter to: Alexander Marion, David Lochbaum, from: Frank Gillespie, dated: August 10, 2006

SUBJECT: PROPOSED LICENSE RENEWAL INTERIM STAFF GUIDANCE  
LR-ISG-2006-03: STAFF GUIDANCE FOR PREPARING SEVERE ACCIDENT  
MITIGATION ALTERNATIVES (SAMA) ANALYSES

**HARD COPY**

DLR RF  
REmch

**E-MAIL:**

PUBLIC  
MRubin  
RPalla  
RidsNrrOd  
RidsNrrAdro  
RidsNrrAdra  
RidsNrrAdes  
RidsNrrDlr  
RidsNrrDra  
RidsNrrDnrl  
RidsNrrDlrRebb  
RidsNrrDlrReba  
DLR Staff

PROPOSED LICENSE RENEWAL INTERIM STAFF GUIDANCE LR-ISG-2006-03:  
STAFF GUIDANCE FOR PREPARING SEVERE ACCIDENT MITIGATION ALTERNATIVES  
(SAMA) ANALYSES

Introduction

A Severe Accident Mitigation Alternatives (SAMA) analysis is required as part of a license renewal application, if a SAMA analysis has not already been performed for the plant and reviewed by the NRC staff. SAMA analyses have been performed and submitted to the NRC as part of all the applications for license renewal received by the staff thus far. Therefore, this LR-ISG is being proposed consistent with our goal to more efficiently resolve license renewal issues identified by the staff or the industry.

Background and Discussion

After receiving extensive requests for additional information regarding the SAMA analyses, several applicants for license renewal concluded that they did not fully understand the kind of information that the NRC staff was expecting to see in SAMA analyses.

The Nuclear Energy Institute (NEI) developed a generic guidance document to help clarify the NRC staff's expectations regarding the information that needs to be submitted in SAMA analyses. On April 8, 2005, NEI submitted NEI 05-01, "Severe Accident Mitigation Alternatives (SAMA) Analysis - Guidance Document." The NRC staff reviewed this guidance document, and by letter, dated July 12, 2005, provided comments on NEI 05-01. The NRC staff's comments were discussed during a public meeting between NEI and NRC on July 21, 2005.

On February 17, 2006, NEI submitted its NEI 05-01, Rev. A, dated November 2005. The NRC staff reviewed and concluded that this version fully resolved the NRC staff's comments. In addition, the NRC staff concluded that NEI 05-01, Rev. A, describes existing NRC regulations, and facilitates complete preparation of SAMA analysis submittals.

Some applicants for license renewal have submitted SAMA analyses using the guidance provided in NEI 05-01, Rev. A. The NRC staff found improved quality in the submitted SAMA analyses and a reduction in the number of requests for additional information for those applications that followed the guidance provided in NEI 05-01, Rev. A.

Proposed Action

The staff is proposing that applicants for license renewal follow the guidance provided in NEI 05-01, Rev. A, when preparing their SAMA analyses. The staff finds that NEI 05-01, Rev. A, describes existing NRC regulations, and facilitates complete preparation of SAMA analysis submittals.

Although this proposed LR-ISG does not convey a change in the NRC's regulations or how they are being interpreted, it is being provided to facilitate complete preparation of future SAMA analysis submittals in support of applications for license renewal. The NRC staff plans to incorporate the guidance provided in NEI 05-01, Rev. A, into a future update of Supplement 1

ENCLOSURE

to Regulatory Guide 4.2, "Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses." Because this LR-ISG provides a clarification of existing guidance with no additional requirements, the staff did not perform a backfit evaluation. For those that are interested in reviewing NEI 05-01, Rev. A, the Agencywide Documents Access and Management System (ADAMS) Accession Number is ML060530203.



NUCLEAR ENERGY INSTITUTE

Project No. 690

cc:

Mr. Joe Bartell  
U.S. Department of Energy  
NE-42  
Washington, DC 20585

Ms. Christine S. Salembier, Commissioner  
State Liaison Officer  
Department of Public Service  
112 State St., Drawer 20  
Montpelier, VT 05620-2601

Mr. James Ross  
Nuclear Energy Institute  
1776 I St., N.W., Suite 400  
Washington, DC 20006-3708

Mr. Frederick W. Polaski  
Manager License Renewal  
Exelon Corporation  
200 Exelon Way  
Kennett Square, PA 19348

Peter A. Mazzaferro  
Site Project Manager - License Renewal  
Nine Mile Point Nuclear Station, LLC  
P.O. Box 63  
Lycoming, NY 13093

Mr. David Lochbaum  
Union of Concerned Scientists  
1707 H St., NW, Suite 600  
Washington, DC 20006-3919

Mark Ackerman  
Project Manager, License Renewal  
FirstEnergy Nuclear Operating Company  
P.O. Box 4  
Route 168 (Mail Stop BV-SGRP)  
Shippingport, PA 15077

Mr. Paul Gunter, Director  
Reactor Watchdog Project  
Nuclear Information & Resource Service  
6930 Carroll Avenue, Suite 340  
Takoma Park, MD 20912

Mr. Hugh Jackson  
Public Citizen's Critical Mass Energy &  
Environment Program  
215 Pennsylvania Ave., SE  
Washington, DC 20003

Mary Olson  
Nuclear Information & Resource Service  
Southeast Office  
P.O. Box 7586  
Asheville, NC 28802

Talmage B. Clements  
Manager - License Renewal  
Progress Energy  
P.O. Box 1551  
Raleigh, NC 27602

Mr. Garry G. Young  
Manager, License Renewal Services  
1448 SR 333, N-GSB-45  
Russellville, AR 72802

Mr. William Crough, Manager  
Licensing and Regulatory Affairs  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Decatur, AL 35609

NUCLEAR ENERGY INSTITUTE

Project No. 690

cc:

Patrick Burke  
License Renewal Project Manager  
Monticello Nuclear Generating Plant  
Nuclear Management Company, LLC  
2807 West County Road 75  
Monticello, MN 55362-9637

Robert A. Vincent  
Licensing Lead - License Renewal Project  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043