

September 6, 2012

MEMORANDUM TO: Alexander R. Klein, Chief  
Fire Protection Branch  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

FROM: Charles E. Moulton, Fire Protection Engineer /RA/  
Fire Protection Branch  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE JUNE 27, 2012, CATEGORY 2 MEETING  
REGARDING NATIONAL FIRE PROTECTION ASSOCIATION  
STANDARD 805: GENERIC QUESTIONS FROM EARLY LICENSE  
AMENDMENT REQUEST REVIEWS

On June 27, 2012, the U.S. Nuclear Regulatory Commission (NRC) staff held a meeting with Nuclear Energy Institute (NEI) representatives, other industry stakeholders, and the public to discuss observations from the NRC staff's reviews of the initial group of non-pilot License Amendment Requests (LARs) for plants that are adopting National Fire Protection Association Standard 805 (NFPA 805).

To open the meeting, Division of Risk Assessment (DRA) management stated that some of the LARs currently under review have significant differences from the pilot applications and can be more complex, as well. DRA management stated that communication is very important to the success of the NFPA 805 program, and that public meetings, like the current meeting, are an important part of the communication effort. DRA management also stated that timeliness, on both the licensee and NRC sides, will be critical to the successful completion of the LAR reviews.

The NRC staff made a presentation regarding observations from the current NFPA 805 reviews. The presentation addressed the following topics:

- Categorization of generic review questions
- Differences between the pilot and non-pilot applications
- Observations about the current applications including
  - Level of detail
  - Information quality
  - Fire modeling technical issues
  - Monitoring program
- NRC concern about post-transition fire protection configuration control.

NEI representatives asked how NRC staff expectations related to these observations would be communicated to the industry. The NRC staff responded that that decision would be made on a

CONTACT: Charles Moulton, NRR/DRA  
(301) 415-2751

case by case basis, but that it would include public meetings, such as the current one, requests for additional information (RAIs), and the NFPA 805 frequently asked question (FAQ) process.

The NRC staff discussed the site audits related to the LAR reviews. The NRC staff stated that timing (in relation to other parts of the LAR review) of the next group of audits may need to be changed due to the large number that would otherwise be due in a short time period. The NRC staff noted that the audits have been going well, but there have been some challenges for licensees, for example, in having enough licensee or contractor experts available to support the audit activities. Additionally, it was noted that licensees should focus on the ease of plant entry for NRC personnel going on plant tours.

The NRC staff discussed the RAI process. The NRC staff stated the current goal was to receive responses to the first round of RAIs for the first six LARs by September 2012. Additionally, the NRC staff noted that the RAI process was being improved such that the goal is for draft RAIs to be transmitted to the licensee within a few days of the end of the audit, and the final version within six weeks of the audit.

Licensee representatives questioned the large number of RAIs that are being issued to the current applicants, even after a successful pilot process. The NRC staff stated that this was because the current LARs contained significant differences from the pilots, and the NRC reviewers do not have the same familiarity with the programs of the non-pilots that they did with the pilots.

Licensee representatives also enquired about the NRC staff's expectations regarding the amount of time licensees have to respond to RAIs. The NRC staff stated that they expected that allowed response times would vary depending on the complexity of the information request, and that this would be resolved on a licensee by licensee basis.

The NRC staff next described, at a high level, the NFPA 805 acceptance review process and the associated timeline.

Licensee representatives made a presentation regarding observations from the current NFPA 805 reviews. The presentation addressed the following topics:

- Difficulties arising in the acceptance review process
- Good experiences at site audits
- Inconsistent level of detail in non-pilot LARs vs. pilot LARs
- Communication challenges around RAIs
- Lack of completion milestones in review schedules

The NRC staff noted that some licensees submitted LARs with significant differences from the pilot LARs. For example, not explicitly stating what the resolution of each variance from deterministic requirements is. This has resulted in the number and types of RAIs issued. The NRC staff stated that they were aware of the challenges surrounding the RAI process and is working to resolve them, as discussed in the earlier presentation. Finally, the NRC staff agreed that issues surrounding review schedules would be discussed during the recurring periodic NRC/NEI management discussion public meetings.

The licensee representatives next made a presentation describing the modification history of the NEI NFPA 805 LAR template.

The NRC staff made a presentation regarding guidance for redaction of NFPA 805 LARs. In summary, the new guidance is that only plant drawings and specific component or cable

location information (that is, specific location dimensions) should be withheld from public release. The staff stated that, with the exception of drawings, most information related to fire protection is already publically available, for example through inspection reports. The NRC staff noted that the submitted LARs run the gamut from redacting a large amount of information to not redacting any information.

NEI representatives made a presentation regarding unreviewed analysis methods (UAMs) for probabilistic risk assessments (PRAs). The definition and history of industry actions to resolve the UAMs was presented. Finally, a high level description of an industry approach to close future UAMs was presented. The NRC staff questioned whether having the narrow definition for UAMs described in the presentation would reduce the utility of the industry closure method.

The NRC staff made a presentation regarding PRA-related lessons from the reviews of the current LARs. The NRC staff stated that NFPA 805 reviews are at the top end of complexity for risk-informed applications. The history of the NRC's review of the two pilot plant LARs was presented and the differences in outcome were highlighted. The NRC staff stated that, initially, there was no intention to review PRA methods, but the circumstances of the LARs is causing a change in approach. The NRC staff also stated that there are a very large number of key assumptions for the NFPA 805 applications. The NRC staff also described their view of the results of the industry UAM panel.

Industry representatives questioned whether the NRC needed to review applicants' PRAs, since they have all been peer-reviewed. The NRC staff responded that the peer review should obviate the need for an NRC in-depth review of the base PRA, allowing the NRC's review to focus on application-specific impacts, key assumptions, and areas identified by the peer review as being of concern.

To close the meeting, DRA management stated that public meetings such as the current one were an important part of successful communication with the industry, and thanked all the participants.

The meeting handouts are available in the Agencywide Documents Access and Management System. The NRC presentations are available at accession numbers ML12178A409, ML12178A407, and ML12178A416. The industry presentations are available at ML121780290. An additional handout is available at ML12178A217.

A list of meeting attendees is enclosed with this memorandum.

Enclosure:  
As stated

location information (that is, specific location dimensions) should be withheld from public release. The staff stated that, with the exception of drawings, most information related to fire protection is already publically available, for example through inspection reports. The NRC staff noted that the submitted LARs run the gamut from redacting a large amount of information to not redacting any information.

NEI representatives made a presentation regarding a path forward concerning unreviewed analysis methods (UAMs) for probabilistic risk assessments (PRAs). The NRC staff questioned whether having the narrow definition for UAMs described in the presentation would reduce the utility of the industry closure method.

The NRC staff made a presentation regarding PRA-related lessons from the reviews of the current LARs. The NRC staff stated that NFPA 805 reviews are at the top end of complexity for risk-informed applications. The history of the NRC's review of the two pilot plant LARs was presented and the differences in outcome were highlighted. The NRC staff stated that, initially, there was no intention to review PRA methods, but the circumstances of the LARs is causing a change in approach. The NRC staff also stated that there are a very large number of key assumptions for the NFPA 805 applications. The NRC staff also described their view of the results of the industry UAM panel.

Industry representatives questioned whether the NRC needed to review applicants' PRAs, since they have all been peer-reviewed. The NRC staff responded that the peer review should obviate the need for an NRC in-depth review of the base PRA, allowing the NRC's review to focus on application-specific impacts, key assumptions, and areas identified by the peer review as being of concern.

To close the meeting, DRA management stated that public meetings such as the current one were an important part of successful communication with the industry, and thanked all the participants.

The meeting handouts are available in the Agencywide Documents Access and Management System. The NRC presentations are available at accession numbers ML12178A409, ML12178A407, and ML12178A416. The industry presentations are available at ML121780290. An additional handout is available at ML12178A217.

A list of meeting attendees is enclosed with this memorandum.

Enclosure:

As stated

DISTRIBUTION:

DRA R/F	AKlein	PLain	APearson	RDaley, RIII	MKing, RII
CMoulton	HBarrett	DHarrison	GMiller, RIV	JRogge, RI	BBeasley

**ADAMS Accession No.: ML122130099**

Office	NRR/DRA/AFPB	NRR/DRA/APLA	NRR/DRA/AFPB
Name	CMoulton	BBeasley <i>D. Harrison for</i>	AKlein
Date	07 / 31 /12	09 / 06 /12	09 / 05 /12

**OFFICIAL RECORD COPY**

**NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805  
GENERIC QUESTIONS FROM EARLY LICENSE AMENDMENT REQUEST REVIEWS  
LIST OF ATTENDEES**

June 27, 2012

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

A. Klein	A. Hazelhoff (ENERCON)
A. Pearson	A. Ratchford (Kleinsorg Group)
B. Metzger	B. Najafi (EPRI)
C. Moulton	B. Simril (TVA)
D. Andrukait	D. MacDougall (AEP)
D. Frumkin	D. Miskiewicz (Progress)*
D. Stroup	D. Rao (Entergy)
G. Taylor	F. dePeralta (Tri-en Corp)
H. Barrett	G. Harris (AmerenUE)*
J. Giitter	H. Hearar (First Energy)
J. Hyslop	J. Butler (NEI)
J. Lai	J. Ertman (Progress)
L. Fields	J. Gregerson (Tri-en Corp)
M. Snodderly	J. Huczek (SWRI)
P. Bamford	J. McWhorter (Entergy)
R. Pedersen	J. Walker (Kleinsorg Group)
S. Dinsmore	K. Hoops (Xcel Energy)
S. Lee	K. McElroy (Southern Nuclear)
	K. Smith (Entergy)
	M. Fletcher (AmerenUE)
	M. Kelly (Xcel Energy)
	M. Lilley (Constellation)
	M. McKeown (Xcel Energy)
	P. Bemis (PG&E)
	P. Boulden (Appendix R Solutions)
	P. Crowe (Entergy)
	P. Mazzaferro (Constellation)
	P. Ouellette (EPM)
	R. Fosdick (SWRI)
	R. Layton (PNNL)*
	R. Najuch (First Energy)
	R. Nance (Entergy)
	R. Nazario (Entergy)
	R. Neild (Constellation)
	S. Meyer (STARS)
	S. Weimer (Entergy)
	T. Maness (NEI)*
	T. Shudak (NPPD)*
	V. Anderson (NEI)
	W. Cross (NextEra)

\* Participated via phone

ENCLOSURE