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April 12, 2000

Mr. Theodore S. Sherr
Chief, Regulatory and International Safeguards Branch
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Two White Flint North 8A33
Washington, D.C. 20555

**Reference: Comments on the March 2000 Draft Version of NUREG-1520
'Standard Review Plan for the Review of a License Application
for a Fuel Cycle Facility': Chapter 8 - Emergency Preparedness**

Dear Mr. Sherr:

The Nuclear Energy Institute (NEI)¹ and its industry members have reviewed the March 2000 revision of draft Standard Review Plan (SRP) Chapter 8 entitled 'Emergency Preparedness'. Time has not permitted a comprehensive clause-by-clause review of this latest revision, but we have attempted to identify any significant, outstanding issues of concern. We have examined how the staff has addressed issues raised by NEI in its letter to you dated September 2, 1999 on the previous version of Chapter 6 (May 1999). We have also taken into consideration discussions that took place at the February 9-10, 2000 NRC Public Meeting (*Comment Resolution on Part 70 Standard Review Plan*).

NEI appreciates the opportunity to have been able to review the March 2000 revisions to draft NUREG-1520 chapters. We are encouraged by the ongoing

Mr. Theodore S. Sherr

¹ NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

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resolution of industry concerns and with other improvements that have been made to this guidance document. We look forward to working with you and your staff at the upcoming April 18-19, 2000 NRC Public Meeting on NUREG-1520 to continue these discussions.

Please feel free to contact me should you have any questions concerning the proposed improvements in the attachment to this letter.

Sincerely,

Felix M. Killar, Jr.
Director, Material Licensees and Nuclear Insurance

c. Mr. Marvin S. Fertel
Dr. William F. Kane, Director NMSS

REVIEW OF MARCH 2000 REVISION OF NUREG-1520
CHAPTER 8: EMERGENCY PREPAREDNESS

General Comments:

Very few changes have been made to the June 2000 version of this SRP chapter. The few concerns industry previously identified -- accurate incorporation of the NRC-OSHA MoU on hazardous chemicals, correct reference to the ISA Summary, training of off-site Emergency Response Organizations -- have not been addressed in the revisions. Some of the reactor terms (e.g. SAR, FEMA) have been deleted. Draft Chapter 8 duplicates much of the information already provided in Reg. Guide 3.67 and often goes beyond the requirements of this Reg. Guide. Industry, therefore, questions the need for such a voluminous treatment in Chapter 8 on the acceptable content of an Emergency Plan. The SRP should make far greater use of Reg. Guide 3.67 and refer the reviewer to that document, rather than attempt to duplicate its content in Chapter 8. This chapter can, therefore, be significantly abbreviated. Significant technical editing of the chapter is needed to improve the logic of the text (e.g. §8.5.2.2), to place greater use of licensee commitments, to reduce the amount of detailed information to be included in the license application and to correct inconsistencies in the use of terminology. The format and structure of this chapter must be better aligned with those of other SRP chapters.

Outstanding Issues of Concern

- Hazardous Chemicals:

Treatment of hazardous chemicals (and specifically, incorporation of the NRC-OSHA MoU into emergency planning) continues to be in error. The (correct) language used in §8.4.3.2.4 ("*...release of radioactive material or hazardous chemicals incident to the process...*") or in §8.6 ("*...release of radioactive material and to any associated chemical process hazards...*") should be applied throughout the chapter whenever reference is made to licensed material and hazardous chemicals associated with the processing or handling of such licensed material.

- ISA Summary Use:

References to the ISA (or ISA Summary) are few and far between. The importance of the ISA Summary in guiding the design of the Emergency Plan has essentially been ignored by the author of this chapter. This deficiency starts in §8.1 when the SRP states that "*...an Emergency Plan is required when an evaluation shows that...*" without indicating that the 'evaluation' is the ISA. References to the ISA and ISA Summary are often confused. The SRP does not clearly state that the reviewer shall consult both information in the license applicant and the docketed ISA Summary..

The level of detail expected in for each is often incorrectly stated. For example, detailed information on types of accident sequences should remain in the ISA Summary and not be included in the license application (§8.4.3.1.2).

- SRP Requirements:

There remains a disconnect between the structure of this chapter and other revised SRP chapters (e.g. Ch. 4 & 5). The latter emphasize licensee commitments, whereas Ch. 8 still focuses on prescriptive requirements. Licensee commitments are especially appropriate for chapter sections such as §8.4.3.2.2 and 8.4.3.2.14 where the requested information will change or that require the EP to be maintained. §8.6 states that the NRC reviewer has examined such commitments, but, in fact, only once does the SRP expect the licensee to commit to anything (§8.4.3.2.13). Much greater uniformity amongst the SRP chapters is needed.

- Off-site EROs:

The SRP continues to erroneously require a licensee to provide formal training to off-site EROs. 10 CFR 70.22(I)(3)(x) does not require this training, but rather just 'orientation and familiarization.' Section 8.4.3.2.14(3) creates a new requirement for off-site EROs to review and comment upon EP changes. Licensees may make changes to the EP without NRC prior review and approval if the change does not adversely affect the effectiveness of the plan. Seeking off-site ERO input will be time-consuming and turn approvals into multi-year efforts with little, if any, enhancement in safety.

- Consistency in Terminology:

Uniformity in terminology is needed. For example, consistent reference to licensed material (rather than radioactive materials), to the Emergency Plan (rather than Emergency Management Program), items relied on for safety (rather than 'safety features' or 'safety controls') is needed. The term 'Protective Action Guides' (§8.4.3.2.9(6)) should be defined. Reference is made to 'hazardous materials' and 'hazardous chemicals' in the same context throughout the chapter; consistency is needed.

Specific Comments:

- §8.1 ('Purpose of Review'):

- (i) 1st sentence of 2nd paragraph should be more specific and indicate that the 'evaluation' is the 'ISA'
- (ii) 2nd sentence: clarify the language to read: "...Licensed facilities requiring an Emergency Management Plan are those authorized to possess..."

- §8.3 ('Areas of Review'):

- (i) 3rd sentence: modify for consistency to read: "...*address coordination with off-site emergency response organizations...*"
- §8.4.3.1.2 ('Types of Accidents'):
 - (i) the provision calling for the Emergency Plan to describe each type of accident sequence identified by the ISA is incorrect. The Emergency plan need only reference, rather than describe, the accidents in the ISA Summary, rather than the ISA. Only those risk-significant accidents are outlined in the ISA Summary.
 - (ii) Item (2): to incorporate the NRC-OSHA MoU correctly, modify this item to read: "...*non-radioactive hazardous materials incident to the processing of SNM that are released...*" Also applies to second item (2) on page 8.0-4
- §8.4.3.1.4 ('Evaluation of Maximum Public Exposure'):
 - (i) item (25): consistent terminology: '*safety features*' should read 'TROFS'
- §8.4.3.2.1.1 ('Operational Facilities'):
 - (i) Who provides the certification required in item (34)? Some guidance should be provided to the reviewer as to whom to consult for this certification.
- §8.4.3.2.2 ('On-Site and Off-Site Emergency Facilities'):
 - (i) an applicant should not be expected to provide a list and description (cf. Item (35)) in the license application, for the contents of these lists will constantly change -- thereby, necessitating non-safety significant license amendments. Similar comments for items (36) and (37). In these cases a '*commitment*' statement is preferable.
- §8.4.3.2.3 ('Types of Accidents'):
 - (i) same comment from §8.4.3.1.2 regarding information that should be included in the ISA Summary, but that need not be included in the license application. '*ISA*' should be '*ISA Summary*'.
- §8.4.3.2.4 ('Classification of Accidents'):
 - (i) this section correctly refers to hazardous chemicals and should be used as an example for addressing this issue elsewhere in Chapter 8.
 - (ii) Item (46): last part of sentence should read: "...*classification during normal operations...*"
- §8.4.3.2.5 ('Detection of Accidents'):
 - (i) item (48) is incomplete. Revise to read: "...*any release of licensed material...*"
 - (ii) this detailed information is presented in the ISA Summary and need not be placed in the license application.
- §8.4.3.2.6 ('Mitigation of Consequences'):

- (i) item (51) requires a description for each accident identified. This statement should reference the ISA Summary: "...for each accident identified in the ISA Summary..."
- (ii) the relevance of this topic to the Emergency Plan is unclear. Mitigation of consequences was a topic of the ISA and is contained in operating procedures. The ERO prepares for isolating initiators, but must depend on operations for safe shut-down. Such detail should only be contained in operating procedures, and not in the license application
- §8.4.3.2.7 ('Assessment of Releases'):
 - (i) item (53(4)): replace 'safety controls' by 'IROFS'
 - (ii) item (54): '...releases of licensed material...
- §8.4.3.2.8 ('Responsibilities'):
 - (i) this entire section should be expressed in terms of 'commitments'
- §8.4.3.2.9 ('Notification and Coordination'):
 - (i) item (6): '*Protective Action Guides*' is an undefined term
 - (ii) item (65-2): requires 15-minute notification that an alert or site emergency has been declared. The parenthetical at the end of this paragraph should be modified to read: "...(normally within 15 minutes of classification)..." The definition of 'prompt' in this item may conflict with NRC's definition of 'prompt' in other parts of the regulations where it generally refers to a one-hour notification period. Some reconciliation may be warranted.
- §8.4.3.2.11 ('Training'):
 - (i) introductory statements contradict provisions of 10 CFR 70. [See comment in '*Outstanding Issues of Concern*']
- §8.4.3.2.14 ('Responsibilities'):
 - (i) this entire section should be better expressed in terms of 'commitments'
 - (ii) item (94) allows off-site organizations 60 days to comment on Emergency Plan changes and to forward such comments to the NRC along with plan changes. This provision should be clarified to solicit public comment for only changes that would affect the organization's ability to respond to an emergency. Name changes, telephone number changes, etc. do not fall into changes requiring review and comment.
- §8.5.2.1 ('Evaluation that no Emergency Plan is Required'):
 - (i) 1st sentence: 'ISA' should be '*ISA Summary*'
- §8.5.2.2 ('Emergency Plan'):
 - (ii) 1st sentence: simplify the clumsy text here and revise it to read: "...after an acceptable application...has been received from the applicant, the..."