65 FR 66573
Nov. 6-2000
(1)

NUCLEAR ENERGY INSTITUTE

RECEIVED
2000 DEC 11 AM 8:04
Rules and Directives

Felix M. Killar, Jr.
DIRECTOR,
Material Licensee Programs
Direct Line 202.739.8126
E-mail: fmk@nei.org

December 1, 2000

Chief, Rules and Directives Branch
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

REFERENCE: Request for Comments on Standard Review Plan for the Re-certification of Gaseous Diffusion Plants (NUREG-1671) Chapters 6 ('Technical Safety Requirements') and Chapter 8 ('Nuclear Criticality Safety') (65 Fed. Reg. 66573, November 6, 2000)

Dear Sir:

The Nuclear Energy Institute (NEI)[1] is pleased to submit the following comments on the proposed revisions to Chapter 6 ('Technical Safety Requirements') and Chapter 8 ('Nuclear Criticality Safety') of NUREG-1671. Our comments support the NRC's objective of incorporating a risk-informed, performance-based regulatory philosophy into regulations and complementary Standard Review Plans (SRP).

Numerous examples of risk-informed terminology have been incorporated into Chapters 6 and 8 of NUREG-1671 (e.g. safety grading, risk evaluation, management measures, safety systems relied on for safety). However, use of such terminology remains inconsistent and often contradictory with the terminology from earlier revisions of these chapters. Chapter 8 remains highly detailed and unnecessarily prescriptive. NEI would encourage the drafters of this chapter to consult the corresponding chapter in NUREG-1520 as an example of how this chapter could be restructured in a less prescriptive manner. The attachment to this letter provides additional detailed comments on each chapter.

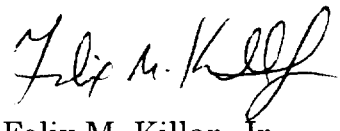
---

[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.

Template: ADM-013
E-RIDS-ADM-03
Add: A. Hoadley (DAH)

NEI appreciates the opportunity to comment on the proposed revisions to Chapters 6 and 8 of NUREG-1671 and we encourage continued efforts to revise it in accordance with the risk-informed, performance-based approach that the NRC has adopted for other SRPs. We should be pleased to discuss our suggested improvements with you and to answer any questions that you may have.

Sincerely,



Felix M. Killar, Jr.
Attachment

COMMENTS SUBMITTED BY
THE NUCLEAR ENERGY INSTITUTE
ON
CHAPTERS 6 AND 8 OF
THE NOVEMBER 2000 REVISION OF NUREG-1671

Chapter 6 ('Technical Safety Requirements')

1. There appears to be inconsistent use of terminology. For example, the management oversight to be applied to safety controls is variously referred to as '*management attention*' (§6.5.3.1, page 4), '*management assurance*' (§6.5.3.1, page 5), '*management controls*' (§6.5.3.1, page 6), and '*management measures*' (§6.5.3.2, page 8). For consistency with other recent NUREGs, NEI recommends that the term '*management measures*' be used throughout Chapter 6.

2. There are some very broad (and sometimes undefined) terms used in the chapter. For example, the term "*...overall risk perspective of the facility...*" used in §6.4.2, item (2) is undefined. The term "*...essential SSCs...*" (as opposed to 'non-essential' SSCs?) referred to in §6.4.2, item (3) requires clarification. In §6.4.2, item (5) the items to which "*...each feature...*" apply is unclear (SSCs?) and must be specified. Finally, the term used in §6.5.3.3 ("*...management...limits...*") must be clarified.

3. The concept of 'safety grading' is directly or indirectly referenced throughout this chapter. But the extent to which such grading can be applied seems to be inconsistent. For example, in §§6.4.2, item (5) and 6.5.3.2, item (9), safety grading is limited to QA applied to SSCs. Safety grading can, however, be applied to maintenance, training, corrective action and other functions in addition to QA. Section 6.5.3.1 seems to apply safety grading to management measures.

4. Incorrect use of the term "risk" is made in several sections of the chapter. For example, in §6.5.3.1, Page 5, Items (1) and (2) the licensee can not demonstrate that the *risk* of accidental criticality is highly unlikely. Rather, the *likelihood* of an accidental criticality can be demonstrated to be highly unlikely. The authors of Chapter 6 fail to recognize that risk is equal to the product of likelihood and consequence. Similarly, in the first paragraph of page 5, point (3) states that "*...TSRs have corresponding risks...*" This is not at all clear.

5. In §6.5.3.2 item (7) the implication is given that surveillance requirements (SR) are relied on to ensure the availability and reliability of safety systems. SR is but one management measure that is used at GDPs. This item (7) should be broadened to indicate that other complementary management measures provide the level of reasonable assurance that the NRC staff seeks.

6. In §6.5.3.2 item (8), NEI would suggest deletion of several words in line 2 so as to read: "*...the administrative controls should be considered adequate if plant organization and management...*" Also in section (d) of item (8), the term "*plant operations review committee*" is too prescriptive and should be replaced by a term appropriate to the licensee's management organization.

Chapter 8 ('Nuclear Criticality Safety')

1. Chapter 8 is poorly structured and inconsistent with the approach and terminology used in Chapter 6 (and perhaps elsewhere in NUREG-1671). It is very detailed, unnecessarily verbose and quite prescriptive and it could be significantly shortened and restructured to be far more useful to the reviewer. There is far too much guidance of the "how to" approach. NEI recommends that Chapter 8 be revised using a format and structure analogous to that in the corresponding Nuclear Criticality Safety chapter of NUREG-1520.

2. Correspondence between §8.3 ("Areas of Review") and §8.5 ("Acceptance Criteria") is required. That is to say, acceptance criteria should be provided for each area of review and *vice versa*. However, there are, for example, no acceptance criteria for area of review §8.3.1, or corresponding areas of review identified for the acceptance criteria in §8.5.3.2, §8.5.3.6 or §8.5.3.7. In the absence of appropriate acceptance criteria, a reviewer will have difficulty in establishing if a topic (area of review) in the licensee's submission is addressed in an adequate and acceptable manner?

3. Information in this chapter is presented in a confusing manner. Division of the 'Areas of Review' and 'Acceptance Criteria' into the four following categories would provide much needed clarification: (i) Management of the NCS Program, (ii) Organization and Administration, (iii) Management Controls (or Management Measures), and (iv) Methodologies and Technical Practices. As it is now written, discussion of technical practices is confusingly scattered throughout the areas of review, review procedures and acceptance criteria.

4. There is no provision for the licensee to make 'commitments' to carry out certain actions. And yet, §8.6 ('Evaluation Findings') states that the staff has reviewed such commitments. This is inconsistent. The SRP should permit a licensee to make binding license commitments – whether based on demonstrated performance prior to license re-certification or for making improvements to safety systems and practices – and provide the reviewer with some guidance on how to

evaluate the acceptability of such commitments.

5. The §8.4 ('*Review Procedures*') requires a complete revision. This section §8.4 should discuss appropriate review techniques of the license recertification submission contents. It is generally a step-by-step procedure that the reviewer uses to determine whether the acceptance criteria in §8.6 have been met. Many paragraphs of information throughout the chapter that tell how the review is to be conducted (who does what, what documents should be examined, etc.) should be consolidated into §8.4 (e.g. §8.3.6, item (6), most of §8.5.3.4).

6. In §8.2 ('Responsibility for Review'), the GDP resident inspectors should be included in the 'supporting' category or reviewers.

7. More consistent use of terminology is required throughout the chapter. For example, references are made to '*management controls*', '*management systems*' or '*management actions*'. For other NRC-licensed facilities the term "*...approved margin of subcriticality for safety...*" is used. In Chapter 8 confusing references are, however, made to terms such as '*criticality margins*', '*NCS margins*', '*margins of criticality safety*', and '*adequate safety margins*'. Terminology usage should be tightened up throughout the entire chapter.

8. The title for §8.5.3 should be changed to read "Regulatory Acceptance Criteria"