

Felix M. Killar, Jr.
DIRECTOR, MATERIAL
LICENSEES & NUCLEAR INSURANCE
Tel: (202) 739-8126

July 20, 1999

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

**Reference: Comments on the June, 1999 Draft Version of NUREG-1520
'Standard Review Plan for the Review of a License Application
for a Fuel Cycle Facility': Chapter 2 - Organization and
Administration**

Dear Mr. Sherr:

The Nuclear Energy Institute (NEI)¹ and its industry members are undertaking detailed reviews of each chapter of the draft Standard Review Plan (SRP) released on June 2, 1999 as part of SECY-99-147. To provide effective guidance on implementation of 10 CFR 70, we believe the SRP should be concisely written and accurately reflect the 'risk-informed, performance-based' regulatory approach incorporated into the Part 70 rule revisions.

Accompanying this letter are NEI's comments on Chapter 2 ('*Organization and Administration*') of the draft SRP. The review is presented in two parts: (i) general comments on the sub-chapter, and (ii) specific language (or stylistic) improvements presented on a red-lined version of the draft SRP sub-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.

NEI is pleased that many improvements to the draft SRP developed in public meetings and workshops and proposed by industry have been incorporated into this

Mr. Theodore S. Sherr
U.S. Nuclear Regulatory Commission
July 20, 1999
Page 2

latest draft of the SRP. The June, 1999 revision is markedly improved over earlier versions issued in 1998 and we compliment the staff for this accomplishment.

We look forward to working with you and your staff to make NUREG-1520 a clear and concise document that will facilitate implementation of the new provisions of 10 CFR Part 70. 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. Carl J. Paperiello, Director NMSS

**COMMENTS ON THE JUNE, 1999 DRAFT VERSION OF NUREG-1520 ‘STANDARD
REVIEW PLAN FOR THE REVIEW OF A LICENSE APPLICATION FOR A FUEL CYCLE
FACILITY’**

CHAPTER 2: ORGANIZATION AND ADMINISTRATION

I. General Comments

The terms ‘*management systems and structures*’ and ‘*management measures*’ are used interchangeably and in a confusing manner throughout Chapter 2. These two terms have distinct and different meanings, and their misuse could confuse the license reviewer. ‘*Management systems and structures*’ has a broad meaning that describes programs and policies implemented at the corporate level by licensee management to ensure that the facility is designed, constructed and operated in a safe and responsible manner. Policies on topics such as procurement, nuclear criticality safety prevention, personnel management and employee compensation, marketing, radiation protection, etc. would be included within its scope. ‘*Management measures*’, in contrast, has a very narrow definition that pertains to procedures implemented by a licensee to ensure that items relied on for safety identified by the ISA are available and reliable when required. NEI recommends that the interchangeable use of these terms be corrected and that the term ‘*management policies*’ be used wherever the broad definition is referenced and ‘*management measures*’ be limited to the narrow definition in the SRP Glossary.

SRP Chapter 2 requires a license applicant to provide detailed information on the design and construction of a facility (e.g. organizational structure (§2.4.3(1)), management control and communications (§2.4.3(2)), experience and qualifications of personnel (§2.4.3(3))). While a licensee may design and construct a facility itself, more likely these tasks will be subcontracted to other entities. NEI recommends, therefore, that the regulatory acceptance criteria require a license applicant to put in place policies to manage and oversee the design and construction of a facility that may be conducted by itself or by suitably qualified contractors. A licensee should implement policies to manage and oversee design and construction work, but not to address the details of approving the communications, organizational group and qualifications of every individual participating in design and construction activities.

NEI again compliments the NRC on extensive use of the term ‘reasonable assurance’ throughout SRP Chapter 2 as was the case in the SRP Abstract and Introduction. Reliance on licensee commitments (§2.4.3) is also commended.

Several overly prescriptive requirements remain in Chapter 2. For example, specification of safety-significant management positions in §2.3 for which

qualification criteria are required should be left for specification by the license applicant. The presumption in §2.3 that a university degree in nuclear engineering is required for a facility operator is (e.g. shift supervisor) is inappropriate. Finally, the requirement that a corporate officer be responsible for Health, Safety and the Environment (HS&E) activities is overly prescriptive. Corporate management is solely responsible for all facility operations, not just HS&E.

II. Specific Comments

Specific comments on draft SRP Chapter 2 are noted on the attached copy of this document.

Ref: I:\Files\Part 70\SRP (June 1999 Version) Sec 2.msw

2.0 ORGANIZATION AND ADMINISTRATION

2.1 PURPOSE OF REVIEW

The purpose of the review of the applicant's organization and administration is to ensure that management ~~policies systems and structures~~ are in place that provide reasonable assurance that the licensee plans, implements, and controls site activities in a manner that ensures the safety of workers, the public, and the environment. The review also ensures that the qualifications for key management positions are adequate. *[Comment: to differentiate between 'management measures' and 'corporate management policies', use of the term 'management policies' is recommended (see NEI's introductory comments)]*

2.2 RESPONSIBILITY FOR REVIEW

Primary: Licensing Project Manager

Secondary: None

Supporting: Primary reviewers for other SRP Chapters, e.g., technical area chapters and management measures chapters; Fuel Facility Inspection staff

2.3 AREAS OF REVIEW

The organizational structure and associated administrative program proposed by the applicant should include administrative policies, procedures, and management ~~policies~~ *measures* *[Comment: see NEI comment for §2.1, above]*, qualifications of key management positions, along with a description of how these are deemed adequate to provide reasonable assurance that the health, safety, and environmental protection (HS&E) functions will be effective.

For new applicants, or already licensed plants undergoing major modifications, the applicant should *explain how the facility design and construction will be managed* ~~address the integration of authorities and responsibilities among the process designers, the architect-engineering firm, the construction contractor, and the plant operator, as applicable,~~ to provide assurance that they will function as needed on the HS&E-related tasks. *[Comment: this requirement is at a far too detailed level, especially if the design and construction has been subcontracted to an EP&C (engineering, procurement and construction) firm. Demonstration by the license applicant that it has in place comprehensive management policies and procedures to closely monitor the EP&C firm's work and to ensure that all HS&E functions and standards are met is the critically important issue here.]*

The application should address how the management ~~policies~~ *[Comment: see NEI comment in §2.1 above]* ~~measures~~ ensure the establishment and maintenance of design and operations. The administrative policies and management measures should describe the relationships among major plant safety functions such as the ISA, *management measures for items relied on for safety* (e.g. configuration management, maintenance, quality assurance (QA), training), radiation safety, nuclear criticality safety, fire safety, chemical safety, environmental monitoring, emergency planning, audits and assessments, and incident investigations. *[Comment: clarification of components of 'management measures' should be made as noted by the proposed corrections]*. The applicant should also describe its qualification criteria for education,

training, and experience for key management positions. ~~Management positions for which such criteria should be described include the plant manager, operations manager, shift supervisor, and managers for various safety and environmental disciplines~~ [Comment: sentence is unnecessarily prescriptive. The licensee will enumerate those safety-important positions for which criteria should be described. Delete sentence.]. Qualification criteria should be described generally, in terms of academic credentials, formal continuing education, and work experience. For example, ~~“...bachelor’s degree in nuclear engineering or related scientific or engineering field, with 5 years experience managing the operations of a nuclear fuel manufacturing facility.”~~ [Comment: this sentence pre-supposes a high level of formal education and considerable experience that may not be warranted for certain plant positions. Delete this sentence. This prescriptive example is not required.]

2.4 ACCEPTANCE CRITERIA

2.4.1 Regulatory Requirements

~~Management policies~~ A management system and administrative procedures for the effective implementation of HS&E functions is required by 10 CFR Part 70.22, 70.23, and ~~70.62(d)~~ other sections of Part 70, as revised,¹ concerning the applicant’s corporate organization, qualifications of the staff, and the adequacy of the proposed equipment, facilities, and procedures to provide adequate safety for workers, the public, and the environment.

2.4.2 Regulatory Guidance

There are no regulatory guides specific to the organization and administration description of fuel cycle facilities.

2.4.3 Regulatory Acceptance Criteria

The application is acceptable if the following criteria are met. Appropriate commitments relevant to these criteria should be included in the applicant’s safety program description.

New Facilities or Facilities Undergoing Major Modifications (In addition to the criteria listed below for existing facilities):

Comment: the following 13 criteria should be revised to clarify that the license applicant should implement management policies to **oversee, monitor and accept responsibility for** the design and construction work for the facility. Unless everything is being done by the applicant (an unlikely scenario), the applicant should not have to worry about communications, management control, personnel qualifications, etc.), but just have in place management policies and procedures to ensure that design and construction specifications are being met and that all HS&E concerns are addressed. See NEI’s comments in the preface to these corrections.]

1. The applicant has identified and functionally described the specific organizational groups responsible for **managing the** designing, constructioning and operationng of the facility. Organizational charts are included in the application.

¹ This reference is to the draft revision to 10 CFR Part 70, subject to on-going dialogue.

2. Clear, unambiguous management control and communications exist among the organizational units responsible for **managing** the design and construction of the facility. ~~A corporate officer is responsible for HS&E activities.~~ **[Comment: redundant sentence. Corporate officers are responsible for all activities, including HS&E.]**
3. The personnel **nominated to manage the** design, construction, and operation of the facility have substantive breadth and level of experience and are appropriately available. The qualifications, responsibilities, and authorities for key supervisory and management positions with HS&E responsibilities, ~~including the plant manager, operations manager, shift supervisor, and HS&E managers (or similar positions),~~ are clearly defined in position descriptions that are accessible to all affected personnel and to the NRC, upon request. **[Comment: unnecessarily prescriptive. The license applicant will define those positions deemed to be safety-significant based upon the results of the ISA and will establish appropriate qualifications.]**
4. The applicant has described specific plans to **commission the facility's start-up and operation.** ~~transition from the design and construction phase to operations.~~

Existing Facilities:

1. Applicant has identified and functionally described the specific organizational groups responsible for ~~designing and operating~~ the facility. Organizational charts should be included. **[Comment: see general comment at the beginning of this section.]**
2. The qualifications, responsibilities, and authorities of key supervisory and management positions with HS&E responsibilities ~~including the plant manager, operations manager, shift supervisor, and HS&E managers (or similar positions),~~ are clearly defined in position descriptions that are accessible to affected persons and to the NRC, upon request. ~~A corporate officer is responsible for HS&E activities.~~ **[Comment: see comment for point (2) above.]**
3. In the organizational hierarchy, the HS&E organization(s) is independent of the operations organization(s), allowing it to provide objective HS&E audit, review, or control activities. "Independent" means that neither organization reports to the other in an administrative sense. Both may report to a common manager. Lines of responsibility and authority are clearly drawn.
4. The individual delegated overall responsibility for the HS&E functions has the authority to shut down operations if they appear to be unsafe, and must in that case approve restart of shutdown operations. ~~Typically, this individual should be at as high a management level as the production or operations manager and have direct line responsibility to the plant manager.~~ **[Comment: unnecessarily prescriptive. Delete sentence.]**
5. The activities essential for effective implementation of the HS&E functions are documented in formally approved, written procedures, prepared in compliance with a formal document control program.
6. The applicant should commit to a simple mechanism for reporting potentially unsafe conditions or activities to the HS&E organization ~~and/or to upper management~~ that is available for use by any person in the plant. Reported concerns are investigated,

assessed, and resolved promptly **by means of a Corrective Action Program.**

7. Effective lines of communication and authority among the organization units involved in the engineering, HS&E, and operations functions of the facility are clearly defined.
8. The applicant has committed to establish formal management measures **required to ensure the availability and reliability of items relied on for safety, when required. Management measures are detailed in SRP Chapter 11.** ~~including configuration management, maintenance, quality assurance (QA), training and qualification, procedures, human factors, audits and assessments, incident investigations, and records management, as necessary and appropriate to ensure the availability and reliability of controls relied on for safety. The detailed guidance for these functions is addressed in separate SRP sections on the specific topic. The applicant also describes how management assures, by formal procedures, that all applicable management measures are appropriately implemented for all structures, systems, and components that are considered items relied on for safety as defined by the safety program and its ISA.~~ **[Comment: superfluous detail that is not required. By qualifying the meaning of 'management measures' through addition of the recommended text, the struck-through text is no longer required.]**
9. Written agreements exist with off-site emergency resources such as fire, police, ambulance/rescue units, and medical services. This is addressed in more detail in Section 7.0, "Fire Safety," and Section 8.0, "Emergency Planning," of this SRP.

Commitments relevant to meeting the acceptance criteria described above are included in the applicant's safety program description.

2.5 REVIEW PROCEDURES

2.5.1 Acceptance Review

The primary reviewer should evaluate the application to determine whether it addresses the "Areas of Review" discussed in Section 2.3, above. If significant deficiencies are identified, the applicant should be requested to submit additional material before the start of the safety evaluation.

2.5.2 Safety Evaluation

~~After determining that the application is acceptable for review in accordance with Section 2.5.1, above,~~ **T**he primary reviewer should perform a safety evaluation against the acceptance criteria described in Section 2.4. The objective of the review is to ensure that the corporate-level management and technical support structure, as demonstrated by organizational charts and descriptions of functions and responsibilities, are clear with respect to assignments of primary responsibility. The primary reviewer consults with the NRC inspection staff to verify that the applicant's management positions are adequately defined in terms of both numbers of persons and their responsibilities, authorities, and required qualifications.

The review process should consist of **an examination of the applicant's organizational structure as described in the application.** **[Comment: the need for a site visit solely to examine the**

applicant's management policies seems unnecessary. Consolidate this section into a single sentence.]

- ~~1. An examination of the applicant's organizational structure and administration as described in the application.~~
- ~~2. Site visits by one or more reviewers (with support from the NRC inspection staff, as appropriate) to review, discuss, and verify implementation of the management structure, systems, and administrative procedures.~~

The supporting staff reviewers determine, on the basis of the foregoing, the overall acceptability of the applicant's management system, management qualifications, organizational structure, and administrative procedures. ~~To facilitate the review of the applicant's proposed organization and administration program, the reviewers should examine organization charts, position descriptions, corporate and plant policies, and the descriptions of administrative procedures and guidance documents concerning HS&E. [Comment: this sentence just repeats what was stated in the first paragraph of §2.5.2. Delete it.]~~ The reviewers should make a determination whether the acceptance criteria of Section 2.4 are satisfied and then prepare an SER in accordance with Section 2.6.

2.6 EVALUATION FINDINGS

The staff's evaluation should verify that the license application provides sufficient information to satisfy the regulatory requirements of Section 2.4.1 and that the regulatory acceptance criteria in Section 2.4.3 have been appropriately considered in satisfying the requirements. On the basis of this information, the staff should conclude that this evaluation is complete. The reviewer should write material suitable for inclusion in the SER prepared for the entire application. The SER should include a summary statement of what was evaluated and the basis for the reviewers' conclusions.

The staff can document the evaluation as follows:

The staff has reviewed the organization and administration for [name of facility] according to the Standard Review Plan Chapter 2.0.

[For new facilities] The applicant has described (1) clear responsibilities and associated resources for **management of** the design and construction of the facility and (2) its plans for management of the project. [Insert a summary statement of what was evaluated and why the reviewer finds the submittal acceptable.] The staff has reviewed these plans and commitments and concludes that they provide reasonable assurance that an acceptable organization, administrative policies, and sufficient competent resources have been established or are committed, to satisfy the applicant's commitments for **management of** the design and construction of the facility.

[For operating and new facilities] The applicant has described its organization and management policies for providing adequate safety management and management measures for the safe operation of the facility. [Insert a summary statement of what was evaluated and why the reviewer finds the submittal acceptable.] The staff has reviewed these measures and concludes that the applicant has an acceptable organization, administrative policies, and

sufficient competent resources are established to provide for the safe operation of the facility under both normal and abnormal conditions.

2.7 REFERENCES

- 1) Code of Federal Regulations, Title 10, Part 70, *Domestic Licensing of Special Nuclear Material*, U.S. Government Printing Office, Washington, DC.
- 2) ~~Proposed Revision to Code of Federal Regulations, Title 10, Part 70, *Domestic Licensing of Special Nuclear Material*, as revised.~~ [Comment: citation no longer necessary. Delete.]
- 3) ~~NUREG-1324, *Proposed Method for Regulating Major Materials Licensees*, Sections 3.1, Organization Plan, and 3.2, Managerial Controls and Oversight, U.S. Nuclear Regulatory Commission, 1992.~~ [Comment: NUREG-1324 is never referenced in SRP Chapter 2. This NUREG should not be cited anywhere in the SRP as the basis for further information on the meaning or interpretation of any of the SRP guidance. Delete this reference.]