

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

July 19, 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 1 - General Information**

Dear Mr. Sherr:

The Nuclear Energy Institute (NEI)<sup>1</sup> 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 1 ('*General Information*') of the draft SRP. Separate reviews are presented for each of the three constituent sub-chapters:

- §1.1 Facility and Process Description
- §1.2 Institutional Information

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<sup>1</sup> 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.

### §1.3 Site Description

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Each 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.

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 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’**

**SECTION 1.1 FACILITY AND PROCESS DESCRIPTION**

**I. General Comments**

Our principal concern with Section 1.1 is its failure to clearly establish the level of detail of the information that should be included in the description. The guidance in §1.4.3(1) stating that it should be “...*at a level of detail appropriate for general familiarization...*” is open to wide interpretation. A reviewer familiar with existing plants may want only a skeleton overview, whereas a new reviewer might deem many pages to be a minimum. A very qualitative, non-technical overview is implied by §1.1.1 which states that the description will be used by “...*the general public to understand the purpose of the facility and its processes;...*”. The only guidance as to the desired level of detail is provided in §1.1.4.3(4) which states that the overview will be “...*less detailed than...the ISA Summary.*” This last statement could be construed to imply inclusion of voluminous and highly detailed information in the ISA Summary. This may not be the case.

NEI recommends that the Facility and Process Description be limited to a narrative discussion that satisfies the general objective of §1.1.1. The reviewer can consult the ISA Summary for more detailed facility and process descriptions, if required. The description should provide information on:

- (i) the location and arrangement of the facility buildings, structures, roadways and access routes
- (ii) location of the facility controlled area (§70.61(f))
- (iii) proximity of facility buildings to the site boundary and nearby populations
- (iv) a systems-level walk-through of the facility’s manufacturing process(es), and
- (v) identification of the raw materials, by-products, wastes and finished products of the facility.

These narrative descriptions would be complemented with plan maps at suitable scales and conceptual process flowsheets.

**II. Specific Comments**

Specific comments on the draft SRP *Introduction* section are noted on the attached copy of this document.

Ref: I\Files\Part 70\SRP (June 1999 Version) Sec 1.1.msw

## 1.1 FACILITY AND PROCESS DESCRIPTION

### 1.1.1 PURPOSE OF REVIEW

[Comment: simplification and clarification of the §1.1.1 text is recommended.]

The purpose of this review is to establish that the license application (or application for license renewal or amendment) includes an overview of the facility layout and a summary description of the structures, systems, equipment, components, and actions of personnel (SSC) used in the its manufacturing processes that comprise the facility's operating objectives. This overview of the application will be used by all reviewers, NRC managers, and the general public to understand the purpose of the facility and its processes. A more detailed description of the facility and its manufacturing processes is contained in the ISA Summary and can be consulted by the staff reviewers, if needed. this information should be provided in appropriate sections of the ISA summary.

### 1.1.2 RESPONSIBILITY FOR REVIEW

Primary: Licensing Project Manager

Secondary: None

Supporting: None

### 1.1.3 AREAS OF REVIEW

[Comment: NEI suggests deletion of descriptive item (5) regarding movement of personnel, materials and equipment. Such movements cannot be reliably predicted. The request for information in item (5) could be rephrased "(5) narrative description of the flow of licensed material through the facility's manufacturing processes". Of greater interest to the NRC would be the proximity of the facility to site boundaries and its location within the controlled area. An item (6) could be added: "(6) proximity of the facility buildings to the site boundary and nearby populations and within the controlled area."]

The staff should review the general facility description and process descriptions provided by the applicant, which should include (1) scaled drawings showing the locations of facility buildings and other major structures, hazardous materials storage areas, on-site roadways, railroad spurs or sidings, and major ingress and egress routes for the site, (2) a text index with titles that are descriptive of the purpose of each feature, (3) the interrelationships of the features, (4) the relationship of facility features to site features, and (5) narrative description of the flow of licensed material through the facility's manufacturing processes the movement of personnel, materials, and equipment during facility operations. and (6) proximity of the facility buildings to: the site boundary, nearby populations, and within the facility controlled area. This information should be consistent with that presented and summarize the information provided in the applicant's ISA summary and in response to the acceptance criteria of this SRP, Section 3.4.3 "Acceptance Criteria", and should also be consistent with information reviewed under the Environmental Protection and Emergency Management chapters of this SRP.

## 1.1.4 ACCEPTANCE CRITERIA

### 1.1.4.1 Regulatory Requirements

[Comment: The only information in §70.61 that could pertain to a facility and process description is that in section (f) – referring to the Controlled area. So as to remove the possible misunderstanding that all topics in §70.61 should be addressed in the Facility and Process Description (e.g. accident sequences, items relied on for safety, etc.), NEI recommends that a more specific regulatory reference be made for §70.61(f) in §1.1.4.1. Note that the correct reference to §70.61 is ‘Performance Requirements’ and no longer ‘Safety Performance Requirements’]

The regulation applicable to the areas of review in this SRP is 10 CFR 70.22, "Contents of Applications", §70.60, "Applicability", and §70.61(f), "Safety Performance Requirements".

### 1.1.4.2 Regulatory Guidance

There are no regulatory guides that apply to a general facility description for a fuel cycle facility.

### 1.1.4.3 Acceptance Criteria

The reviewer will determine that the applicant’s presentations with respect to this section of the SRP are acceptable if the following criteria are met:

1. The application presents the facility and process description at a level of detail appropriate for general familiarization and understanding of the proposed facility and processes. [Comment: redundant phrase]
2. The application presents a summary of the facility information contained in the ISA Summary presented in the application in response to the guidance described in Section 3.5, Item 2 of this SRP. This includes descriptions of the overall plant layout on scaled drawings, including site geographical features, and plant structural features such as buildings, towers, and tanks and transportation right of ways. The relationship of specific facility features to the major processes that will be ongoing at the facility is described.
3. The major chemical or mechanical processes involving SNM to be licensed are described in summary form, based in part on information presented in the ISA Summary application in response to the guidance described in Section 3.5, Item 3 of this SRP. This description should include reference to the building locations of major components of the processes, brief descriptions of the process steps, the chemical forms of SNM in process, the maximum amounts of SNM in process in various building locations, and the types, amounts, and discharge points of waste materials discharged to the environment from the processes. [Comment: the maximum amounts of SNM that might be stored for each building will vary and be difficult to reliably estimate. The total amount of licensed material that a licensee may possess at the facility would be a better number for informational purposes.]

4. ~~The general description of the facility and processes is consistent with, yet less detailed than, information presented in the applicant's ISA summary. [Comment: this statement is redundant and should be deleted. The entire Facility and Process Description is a subset of the information contained in the ISA Summary.]~~

## 1.1.5 REVIEW PROCEDURES

### 1.1.5.1 Acceptance Review

The staff review starts with a determination by the primary reviewer that the ~~content of the application as required by 10 CFR Part 70 regarding facility and process design for fuel cycle facilities has been included, and that topics discussed in Section 1.1.3, "Areas of Review," have been included~~ in the application.

If significant deficiencies are identified in the application, the applicant should be requested to submit additional material before the start of the safety evaluation. ~~The reviewer should then determine that the applicant has provided the information required. If necessary, a request for additional information should be prepared for issue to the applicant. [Comment: repetitive and redundant sentences – delete]~~ With the complete submittal available, the reviewer should examine the ~~facility and process descriptions summary data~~ and determine their acceptability by comparison with the acceptance criteria in section 1.1.4.3 ~~and consistency with above and~~ information in the ISA summary.

### 1.1.5.2 Safety Evaluation

~~If the application is accepted for NRC review, the reviewer will proceed by comparing the application with the acceptance criteria. [Comment: repetitive and redundant sentence]~~ The material to be reviewed is informational in nature, and no technical analysis is required. The information to be reviewed is only used as background for the more detailed descriptions in later sections of the application. Therefore, the primary reviewer only confirms that the descriptive information presented is consistent with the information presented in the ISA summary.

## 1.1.6 EVALUATION FINDINGS

~~The staff's review verifies that~~ If sufficient information has been provided in the license application to satisfy the 10 CFR Part 70 requirements for this section and that the regulatory acceptance criteria in section 1.1.4.3 are appropriately satisfied, ~~On the basis of this information,~~ the staff concludes that this evaluation is complete. The reviewer writes material suitable for inclusion in the SER prepared for the entire application. The report includes a summary statement of what was reviewed and why the reviewer finds the submittal acceptable. The staff can document the review as follows:

The staff has reviewed the general facility description for [name of facility] according to the Standard Review Plan Section 1.1. The applicant has adequately described (1) the facility and processes so that the staff has an overall understanding of the relationships of the facility features and (2) the function of each feature. The applicant has cross-referenced its general description with the more detailed descriptions elsewhere in the application. The staff concludes that the applicant has complied with the general requirements of 10 CFR 70.22, "Contents of

Applications", §70.60, "Applicability", and with §70.61 (f), "Safety Performance Requirements", as applicable to this section.

### **1.1.7 REFERENCES**

*Code of Federal Regulations*, Title 10, Part 70, Domestic Licensing of Special Nuclear Material, U.S. Government Printing Office, Washington, DC.



**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’**

**SECTION 1.2 INSTITUTIONAL INFORMATION**

**I. General Comments**

Section 1.2 reads well and only minor corrections are suggested. The SRP occasionally seeks detailed information that is not relevant to ‘Institutional Information’. For example, the requirement in §1.2.4.3(4) to describe “...*each activity or process in which SNM is to be used...*” is inappropriate for inclusion in the Institutional Information chapter.

There are several incorrect references to the Part 70 rule. For example, §1.2.4.3(1) requires demonstration “...*that there is no controlling foreign interest...*” in a facility. 10 CFR Part 70 places no such restrictions on foreign ownership of fuel cycle facilities. Similarly, there is no requirement in the Part 70 rule to describe “...*primary ownership and relationships to other components of the same ownership...*” These errors should be corrected.

**II. Specific Comments**

Specific comments on the draft SRP Chapter 1.2 are noted on the attached copy of this document.

Ref: I:\Files\Part 70\SRP (June 1999 Version) Sec 1.2.msw

## 1.2 INSTITUTIONAL INFORMATION

### 1.2.1 PURPOSE OF REVIEW

The purpose of this review is to establish that the license application includes adequate information identifying the applicant, the applicant's characteristics, and the proposed activity.

### 1.2.2 RESPONSIBILITY FOR REVIEW

Primary: Licensing Project Manager

Secondary: None

Supporting: Office of the General Counsel; Office of Administration/Division of Security

### 1.2.3 AREAS OF REVIEW

Information provided for review should include the identity and address of the applicant's facility and corporate headquarters; corporate information sufficient to show the relationship of the applicant's organization relative to other corporate entities; the existence and extent of foreign ownership or influence; financial information sufficient to indicate the resources available to the applicant to pursue the activities for which the license is sought; the site location as legally described in land records; a description of each proposed licensed activity in the form of requested authorized uses; the type of license being applied for; and the type, quantity, and form(s) of material(s) proposed to be used at the licensed facility [Comment: strictly speaking, it is the facility that is being licensed, not the SNM.].

### 1.2.4 ACCEPTANCE CRITERIA

#### 1.2.4.1 Regulatory Requirements

The regulations applicable to the areas of review in this SRP are 10 CFR 70.22, "Contents of applications", §70.23, "Requirements for the Approval of Applications", ~~§70.61, "Performance Requirements", §70.65, "Additional Contents of Applications,"~~ 10 CFR 2.109 "Effect of Timely Renewal Application," 10 CFR 70.33, "Renewal of Licenses," and 10 CFR 95, "Security Facility Approval and Safeguarding of National Security Information and Restricted Data." [Comment: information in §70.61 and 70.65 and in 10 CFR 2.109 is not relevant to 'Institutional Information.' These superfluous citations should be deleted.]

#### 1.2.4.2 Regulatory Guidance

There are no regulatory guides that apply to institutional information for a fuel cycle facility.

#### 1.2.4.3 Regulatory Acceptance Criteria

The application is acceptable if the following criteria are met:

1. Corporate Identity

The applicant has furnished its full name and address. The address of the fuel cycle facility is provided if it is different from that of the applicant. If the application is for renewal, the applicant identifies the number of the license to be renewed. A full description of the plant site location (State, county, and municipality) is given. The State where the applicant is incorporated or organized and the location of the principal office are indicated. If the applicant is a corporation or other entity, the names and citizenship of its principal officers are provided. The entity to be licensed is clearly described with respect to any higher level related corporate structure. The description clearly identifies and explains any proposed foreign ownership or control of activities, ~~and shows that there is no foreign controlling interest.~~ [Comment: this clause is wrong. Provisions of 10 CFR 70.22(a)(1) require foreign ownership to be identified, but not denied.] ~~Primary ownership and relationships to other components of the same ownership are explicitly described.~~ [Comment: there is no requirement for this information in 10 CFR 70.22. Delete this sentence.] The presence and operations of any other company on the site to be licensed are fully described.

2. Financial Qualifications

A description of financial qualifications demonstrates the applicant's current and continuing access to the financial resources necessary to engage in the proposed activity in accordance with §70.22(a)(8) and §70.23(a)(5). [Comment: the reviewer could also be directed to consult an applicant's Decommissioning Funding Plan (§70.25) as part of the evaluation of the applicant's financial worthiness.]

3. Type, Quantity, and Form of Licensed Material

[Comment: NEI has three concerns with this section:

- (i) there is no Part 70 rule requirement to document the amounts of Agreement State licensed radioactive material that a facility may possess. Knowledge of the total amount of SNM at a facility is important, not whether it originates from Agreement States. This information is irrelevant to the 'Institutional Information' chapter of the SRP and should not be solicited.
- (ii) the proposed possession of special moderators is inappropriate information for the 'Institutional Information' chapter. Their use in the process, if any, will be discussed in detail elsewhere in the application. Delete the last sentence of this section.
- (iii) the request for information on the "...trace impurities or contaminants...in the SNM..." is inappropriate for the 'Institutional Information' chapter. Why is this information needed? It may vary by shipment of SNM received at the facility. Delete this sentence.]

The elemental name, maximum quantity, and specifications, including the chemical and physical form(s), of the special nuclear material the applicant proposes to acquire, deliver, receive, possess, produce, use, transfer or store are identified. For special nuclear material, the specifications include the isotopic content and amount of enrichment by weight percent. ~~In addition, any trace impurities or contaminants, such as~~

~~fission products or transuranics are characterized by identity and concentration. The applicant describes the amounts, if any, of Agreement State licensed radioactive material for the proposed facility. The proposed possession at the facility of any moderator or reflector with special characteristics, such as beryllium or graphite, is identified.~~  
[Comment: delete this sentence. See comment (3) above.]

#### 4. Authorized Uses

[Comment: the request for a description of each activity or process in which SNM will be used is excessive and inappropriate for inclusion in the 'Institutional Information' chapter. Only a summary, non-technical narrative description of SNM processes is required.]  
~~Each activity or process in which special nuclear material is proposed to be acquired, delivered, received, possessed, produced, used, processed, transferred, or stored is described.~~ The authorized uses of SNM proposed for the facility should be described and be are consistent with the Atomic Energy Act of 1954, et seq. The description is consistent with more detailed process descriptions submitted as part of the ISA summary reviewed under Section 3.0 of this SRP.

If the application is for a renewal, the applicant states the period of time for which license renewal is requested, and why the renewal application should be considered timely in accordance with 10 CFR 70.

#### 5. Special Exemptions or Special Authorizations

Specific requests for exemptions or authorizations of an unusual nature should be listed in this section and justified in the appropriate technical section of the application.

#### 6. Security of Classified Information

If applicable, applicant has requested and received a facility security clearance in accordance with 10 CFR 95.

### **1.2.5 REVIEW PROCEDURES**

#### **1.2.5.1 Acceptance Review**

~~The staff review starts with a determination by the primary reviewer that the content of the application has been included as required by 10 CFR Part 70 regarding institutional information for fuel cycle facilities and that the information discussed in is complete and addresses each issue in Subsection 1.2.3, "Areas of Review," has been included.~~

If significant deficiencies are identified in the application, the applicant will be requested to submit additional material before the start of the safety evaluation.

#### **1.2.5.2 Safety Evaluation**

~~If the application is accepted for review, the reviewer conducts the review with respect to the acceptance criteria in section 1.2.4 above.~~ The material to be reviewed is for the most part informational in nature, except for information on financial qualifications and foreign ownership and control, and detailed technical analysis is generally not required beyond the acceptance

criterion. The reviewer requests review assistance, as needed, from the Division of Security and the Office of the General Counsel in the review of corporate and financial information. The material provided by the applicant should satisfy the acceptance criteria of section 1.2.4. above.

## 1.2.6 EVALUATION FINDINGS

~~If The staff's review will verify that sufficient information has been provided in the license application to satisfy the regulations listed under section 1.2.4.1 above with respect to institutional information and that the information provided is consistent with the guidance of this SRP. On the basis of this information, the staff will conclude that this evaluation is complete. The staff can document its review as follows:~~

The staff has reviewed the institutional information for [name of facility] according to Standard Review Plan Section 1.2. Based on the review, the NRC staff has determined that the applicant has adequately described and documented the corporate structure and financial information, and that the applicant is in compliance with those parts of 10 CFR 70.22 and 70.65 relating to other institutional information. In addition, the applicant has adequately described the types, forms, quantities, and proposed authorized uses of licensable materials to be permitted at this facility, as follows:

<u>Material</u>	<u>Form</u>	<u>Quantity</u>	<u>Authorized Use(s)</u>
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~~[Comment: there is no need for this type of table (and the level of detail required), especially as the information will change frequently. Delete it.]~~

The applicant's proposed activities are consistent with the Atomic Energy Act. The applicant has provided all institutional information necessary to understand the ownership, financial qualifications, location, planned activities, and nuclear materials to be handled in connection with the requested license.

## 1.2.7 REFERENCES

*Code of Federal Regulations*, Title 10, Part 70, Domestic Licensing of Special Nuclear Material, U.S. Government Printing Office, Washington, DC.

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REVIEW PLAN FOR THE REVIEW OF A LICENSE APPLICATION FOR A FUEL CYCLE  
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**SECTION 1.3 SITE DESCRIPTION**

**I. General Comments**

Section 1.3 generally reads well. There are confusing references as to where the information for the site description should originate. The SRP appears internally inconsistent by sometimes requesting information from the ISA Summary and at other times from the ISA. This inconsistency should be resolved by solely referencing the ISA Summary.

NEI’s principal objection to this chapter, however, is the requirement for *design basis* information. The site description should only present factual, measured data for each field (meteorology, hydrology, geology, seismology, etc.). Design basis and any hypothesized data should be discussed and justified, instead, in the ISA. (If deemed appropriate, some design basis information could also be reproduced in the ISA Summary). Furthermore, design basis information should not be required of fuel cycle facility licensees who do not need NRC approval of facility design or construction. NEI would also recommend that the term ‘design basis’ not be used to describe an ‘evaluation basis event’ used in preparing the ISA. As written, the SRP seeks consideration of the ‘maximum’ precipitation or seismic event, whereas only consideration of the most severe, documented historical event should be required. NEI recommends that the SRP requirement for design basis information and ‘maximum’ natural events be eliminated from the Site Description chapter.

Omitted from this chapter are two sections included in each other SRP chapter: ‘Regulatory Requirements’ and ‘Regulatory Guidance’. The former should be inserted as §1.3.4.1 and make reference to 10 CFR Parts 50 and 70.22. The latter should be inserted as §1.3.4.2, even if no regulatory guidance is available to support preparation of a Site Description.

**II. Specific Comments**

Specific comments on the draft SRP *Introduction* section are noted on the attached copy of this document.

## 1.3 SITE DESCRIPTION

### 1.3.1 PURPOSE OF REVIEW

The purpose of this review is to determine that the information provided by an applicant adequately describes the geographic, demographic, meteorological, hydrologic, geologic, and seismologic characteristics of the site and the surrounding area. The site description is a summary of the information used by the applicant in preparing the Environmental Report, Emergency Plan, and the ISA summary. ~~which identify hazards, potential credible accidents, and the consequences of those accidents. [Comment: this clause is unnecessary. It is also erroneous as the ISA Summary may not address non-safety significant accident sequences. Delete this clause.]~~

### 1.3.2 RESPONSIBILITY FOR REVIEW

Primary: Licensing Project Manager

Secondary: ISA Reviewer, Environmental Protection Reviewer, and Emergency Plan Reviewer

Supporting: Fuel Facility Inspection staff

### 1.3.3 AREAS OF REVIEW

The types of information NRC staff will review include the following (as appropriate for the facility being reviewed):

#### 1. Site Geography

- a. Site location: state, county, municipality, topographic quadrangle (7 1/2 minute series). [Comment: noting the locations of the facility's site boundary and controlled area may be appropriate as well.]
- b. Major nearby highways.
- c. Nearby bodies of water.
- d. Any other significant geographic feature that may impact accident analysis within one mile of the site (e.g., ridges, valleys, specific geologic structures).

#### 2. Demographics

- a. Latest census results for area of concern.
- b. Description, distance, and direction to nearby population centers.
- c. Description, distance, and direction to nearby public facilities (e.g., schools, hospitals, parks).
- d. Description, distance, and direction to nearby industrial areas or facilities that may present potential hazards (including other nearby nuclear facilities).
- e. Uses of land within one mile of the facility (i.e., residential, industrial, commercial, agricultural).
- f. Uses of nearby bodies of water.

3. Meteorology
  - a. Primary wind directions and average wind speeds.
  - b. Annual amount and forms of precipitation. ~~The design basis values for accident analysis of maximum snow or ice load, probable maximum precipitation.~~ [Comment: delete references to design bases; reference only in the ISA.]
  - c. Type, frequency, and magnitude of severe weather (e.g., lightning, tornado, hurricane). ~~Design basis event descriptions for accident analysis.~~ [Comment: delete references to design bases; reference only in the ISA.]
  
4. Hydrology
  - a. Characteristics of nearby rivers, streams, and bodies of water as appropriate.
  - b. Depth to the water table; potentiometric surface map.
  - c. Groundwater flow direction and velocity for the site.
  - d. Characteristics of the uppermost aquifer.
  - e. ~~Design basis Historical~~ flood events ~~used for accident analysis.~~ [Comment: delete references to design bases; reference only in the ISA.]
  
5. Geology
  - a. Characteristics of soil types and bedrock.
    - (ii) ~~Measured Design basis~~ earthquake magnitudes ~~used for accident analysis.~~ [Comment: delete references to design basis; reference only in the ISA.]
    - (i) Description of other geologic hazards, e.g. mass wasting.

The above information complements and is consistent with the information presented in the Environmental Report, Emergency Plan, and ISA summary prepared by the applicant. In contrast to these more detailed descriptions, the summary site description reviewed under this section is less detailed and ~~more brief~~ briefer [Comment: correct English usage.]

### **1.3.4 ACCEPTANCE CRITERIA**

#### 1.3.4.1 Regulatory Requirements

Regulations applicable to the areas of review in this SRP chapter are 10 CFR 70.22 'Contents of Applications.'

#### 1.3.4.2 Regulatory Guidance

There are no regulatory guidelines that apply to site descriptions for a fuel cycle facility.

#### 1.3.4.3 Regulatory Acceptance Criteria

The site description summary will be considered acceptable if the following is included:

1. A brief description of the site geography, including its location relative to prominent natural and man-made features such as mountains, rivers, airports, population centers, schools, commercial and manufacturing facilities, etc. [Comment: one should possibly



add consideration of the site boundary and controlled area in a discussion of the site geography.]

2. Population information based on the most current available census data to show population distribution as a function of distance from the facility.
3. Appropriate meteorological data. Applicant's presentation or discussion includes design basis values for accident analysis of maximum snow or ice load, and probable maximum precipitation. The applicant presents appropriate design basis values for lightning, high winds, tornado, hurricane, and other severe weather conditions that are applicable to the site: [Comment: delete references to design bases; reference these only in the ISA.]
4. A description of the hydrology, and geology, including seismicity, for the area. Applicant describes the design basis flood event for which the plant may be safely shut down. This event is at least the 100 year flood for the site, and is consistent with U.S. Army Corps of Engineers flood plain maps. [Comment: delete references to design bases; reference these only in the ISA.] The applicant describes the maximum earthquake magnitude and peak ground acceleration at the site and its expected likelihood, in terms of return period at which the plant processes can be shut down safely with acceptable risk of radiological exposure to workers, public, and the environment. Applicant compares the design basis earthquake with the maximum earthquake accelerations expected on the site with a return period of 10,000 years. The purpose of the comparison is to evaluate the likelihood of the design basis earthquake to ensure that such an event is properly considered in the applicant's ISA. [Comment: the last two sentences refer to an ISA procedure and should be deleted from this SRP Chapter 1.3 presentation of factual site information.]

[Comment: the following paragraph is inconsistent with the last paragraph in §1.3.3. Both should refer to the same documents, and specifically to the ISA Summary.]

Applicant's descriptions are consistent with the more detailed information presented within the ISA Summary information in Chapter 3 of the application, the Environmental Report, and the Emergency Plan, if applicable. The information in the description is based on official assessments prepared by Federal, state, or local authorities. [Comment: this last sentence is incorrect as a majority of the information will be developed by the applicant without any "official assessments" by government authorities. Delete the sentence.]

## **1.3.5 REVIEW PROCEDURES**

### **1.3.4.1 Acceptance Review**

[Comment: the language throughout §1.3.5 can be significantly simplified and made consistent with that used in SRP Chapters 1.1 and 1.2].

The staff will initially determine that the application is complete and addresses all review starts with a determination by the primary reviewer that the application provides the content as required by 10 CFR Part 70 regarding the site description for fuel cycle facilities, and that topics discussed in Section 1.3.3, "Areas of Review," have been addressed. The information in this section provides a general summary of the bases for evaluations completed in the ISA Summary section of the application. [Comment: there is no "...ISA section..." of a license application.]

~~Delete this incorrect reference.] and is consistent with the applicant's environmental report and emergency plan. The applicant may include references to the more detailed data used to complete evaluations in the ISA Summary. The primary reviewer reviews the information in the application for completeness. [Comment: repetitive sentence. Delete.]~~

If significant deficiencies are identified in the application, the applicant will be requested to submit additional material before the start of the safety evaluation. ~~The detailed information necessary to support the site description summary will be included in the ISA section of the application. [Comment: repetitive sentence. The chapter states earlier that the detailed information is available in the ISA Summary. There is no ISA section of a license application.]~~

For license renewals, the details necessary to support the information in the site description summary may be referenced to prior submittals or material included elsewhere in the renewal application.

#### **1.3.4.2 Safety Evaluation**

The material to be reviewed in this section is informational, summarizing ~~that contained the reports and information which provide the bases for the ISA evaluations. The primary reviewer verifies that the information is acceptable using the acceptance criteria of this SRP, and accurately portrays and is consistent with the information in the ISA summary, Environmental Report, Emergency Plan and other documents referenced by the applicant. No technical analysis is required, as the primary reference for the information is the ISA Summary. If information being verified is found to be inconsistent from the primary source, the applicant is requested to submit clarifying information or corrections. [Comment: repetitive sentence of two paragraphs above. Delete it.]~~ This section may also need to be updated by the applicant based upon any information changes made in response to the staff's environmental, emergency management, and ISA Summary reviews.

#### **1.3.6 EVALUATION FINDINGS**

~~If The staff's review verifies that sufficient information has been provided in the license application to satisfy 10 CFR Part 70.22, "Contents of Applications," requirements with respect to the site description and that the information provided and is consistent with the guidance in this SRP, and information contained in other sections of the application. On the basis of this information, the staff concludes that this evaluation is complete and the applicant's site description is acceptable. The staff can document its review as follows:~~

The staff has reviewed the site description for [name of facility] according to the Standard Review Plan Section 1.3. The applicant has adequately described and summarized general information pertaining to (1) the site geography, including its location relative to prominent natural and man-made features such as mountains, rivers, airports, population centers, schools, and commercial and manufacturing facilities; (2) population information based on the most current available census data to show population distribution as a function of distance from the facility; (3) meteorology, hydrology, and geology for the site; and (4) applicable design basis events. The reviewer verified the site description to be consistent with the information used as a basis for environmental, emergency management, and ISA Summary analyses.

#### **1.3.7 REFERENCES**

*Code of Federal Regulations*, Title 10, Part 70, Domestic Licensing of Special Nuclear Material,  
U.S. Government Printing Office, Washington, DC.