

To: Andrew Persinko, Task Force Manager – AXP1@NRC.GOV
Barry T. Mendelsohn, Website Manager – BTM1@NRC.GOV

FROM: Steve W. Schilthelm, Manager, Nuclear Safety
BWXT Technologies, Inc.
Naval Nuclear Fuel Division (NNFD)
P. O. Box 785
Lynchburg, VA 24505

SUBJECT: NUREG-1520, “Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility”

Dear Sirs:

Please find attached NNFD’s comments regarding the subject document. NRC has clearly tried to address some of our concerns with the SRP and has made progress in some areas in the short period of time available. BWXT, however, is extremely concerned about the overly prescriptive nature of the SRP and the apparent confusion regarding whether information is expected to be included in a license application, ISA Summary, or in ISA documentation maintained on site.

BWXT looks forward to a continuing process on the SRP, similar to that which proved successful on the rule, so that we can develop a document, which meets the needs of the licensee, NRC, and public.

I appreciate the opportunity to comment. If you have any question, feel free to contact me.

Regards,

Steve W. Schilthelm

Standard Review Plan Comments

Abstract, Introduction, Glossary, Acronyms

Introduction – Page 4 of 8, paragraph 4, 3) – add “not” between “does” and “prevent”

Glossary – Page 1 of 3 – Active Engineered Controls – Relief valves do not clearly fit this definition, but is a common “automatic control” requiring no human intervention.

All Sections

SRP chapters do not clearly delineate what reviewer is reviewing. Programmatic commitments will be found in the application. Since the SRP will also serve as a Standard Format and Content Guide, this SRP implies eleven chapters in a license application which contain commitments to programs and some very general process descriptions and authorizations. In addition, the reviewer will have an ISA Summary document. This document will contain specific process information and non-generic information about the ISA evaluation of the specific process. The SRP (especially chapter 3) should clearly delineate to the reviewer which document the information should be found.

Chapter 1.0 General Information

Section 1.1 - This section does not add value when compared to 1.2.1

Section 1.1.3, last sentence – Why duplicate ISA summary?

Section 1.1.4.3, paragraph 4 – Why duplicate ISA?

Section 1.1.5.1, last sentence – Duplicative

Section 1.1.5.2, last sentence – Duplicative with ISA summary

Section 1.2.5.1, last paragraph – Within 30 days of receipt of the application.

Section 1.2.6, second paragraph, second sentence, “review” – redundant

Chapter 2.0 Organization and Administration

Given the existence of chapter 11, which is not in current license, this section should focus only on organization

The following information is redundant:

- Section 2.3, first paragraph , “...administrative policies, procedures, and management measures,” – In chapter 11
- Section 2.3, third paragraph (pages 1 & 2 of 5) – In chapter 11
- Section 2.4.3, paragraph # 5, page 3 of 5 – In chapter 11
- Section 2.4.3, paragraph # 8, page 3 of 5 – In other chapters, chapter 11
- Section 2.4.3, paragraph # 9, page 3 of 5 – In chapter 8
- Section 2.5.2, paragraph # 2, “...administrative procedures,” page 4 of 5 – In chapter 11

Section 2.4.3, “New Facilities...,” paragraph # 2, second sentence, page 2 of 5 – Too specific.

Section 2.4.3, “Existing Facilities,” paragraph # 2, last sentence, page 3 of 5 – Too specific.

Section 2.4.3, “Existing Facilities,” paragraph # 4, last sentence, page 3 of 5 – Too specific.

Section 2.3, paragraph 2 – Too prescriptive, e.g., directing corporate policy

Section 2.3, paragraph 2, “management measures” – Duplicative

Section 2.3, paragraph 3, “management measures” (twice) – Should address only fire, chemical, nuclear criticality safety, radiation protection, per the rule

Section 2.3, paragraph 3 – Delete entire paragraph because it is duplicated elsewhere in SRP

Section 2.4.3, page 3 of 5, paragraph 3 – too prescriptive

Chapter 3.0 Integrated Safety Analysis

SRP appears to be geared toward a process that demonstrates that all risks identified are treated equally. The proposed rule (10CFR70.61) uses a graded approach, which is more appropriate.

This whole section needs to be rewritten into two parts as described below.

Part A – Review of Chapter 2 of License Application “ISA Commitments”

- Team qualification
- Commitment and methods to complete ISA
- Commitment and methods to maintain information
- Acceptable methods to conduct ISA
- Commitment and methods to the following: use of competent staff in the ISA process (section 3.1, paragraph 4); the make-up of the ISA team (section 3.3 first paragraph); the ISA team’s training and qualifications (section 3.3 paragraph # 5); the facility procedures for conducting and maintaining the ISA as described in section 3.3, page 3 of 31, paragraph # 10; the management of the ISA process (section 3.4.3, first paragraph); Process Safety Information as described in section 3.4.3, page 5 of 31, items 4. a-c and 5 a-d; the descriptive summary of the ISA methodology (section 3.4.3 paragraph # 6, page 6 of 31); a demonstration that valid consequence evaluation methods have been used, as described in the appropriate chapters of the license application (section 3.4.3 paragraph # 6.c, page 7 of 31); use of acceptance criteria as described in section 3.4.3, page 9 of 31, paragraph c, last paragraph on page; and use of likelihood criteria as described in section 3.4.3, page 10 of 31, paragraph entitled, “Likelihood Criteria”
- Consequence/likelihood methods – no details of any system

Part B – Review of ISA summary for new licensees or major amendment to determine that the licensee has done the following:

- Performed a comprehensive ISA, identified and evaluated all hazards and credible accident sequences, designated items relied on for safety – see details in section 3.1, paragraph #’s 1-3 (page 1 of 31)
- Performed an ISA in accordance with section 3.3, paragraph #’s 6-9 (pages 2&3 of 31). Note: This level of review is too detailed. It would take forever. May be necessary for new plant.
- Designated controls (section 3.4.3, first paragraph, page 4 of 31).
- Described the general features that are relied on or required for safety (section 3.4.3, paragraph # 2, page 4 of 31); described the facility as shown in section 3.4.3, paragraph #’s 2.a-c, pages 4&5 of 31.
- Described the features of the processes analyzed as shown in section 3.4.3, paragraph # 3, pages 5 of 31.
- Used a hazard identification method as described in section 3.4.3, paragraph #’s 6.a&b, pages 6&7 of 31
- Documented the ISA results as described in section 3.4.3, paragraph #7, page 7
-

Chapter 3, continued

- Shown completeness as described in section 3.4.3, paragraph “a. COMPLETENESS,” page 8 of 31
- Shown adequate evaluation of consequences of accidents as described in section 3.4.3, paragraph “b. CONSEQUENCES,” page 9 of 31
- Shown compliance with 10CFR70.61 and 70.62(a) as described in section 3.4.3, paragraph “c. LIKELIHOOD,” page 9 of 31

Section 3.1, paragraph 2 – Focus on four areas of concern: fire, chemical, radiation protection, nuclear criticality safety.

Section 3.1, paragraph 2, “facility worker” – Define

3.3 AREAS OF REVIEW

Paragraph 9. Contrary to the implication in this paragraph, “assurance measures” is not a defined term in the Glossary. Perhaps the reference should be to “management measures.”

3.4 ACCEPTANCE CRITERIA

This section is internally inconsistent and markedly inconsistent with the proposed rule with regards to what information makes up the ISA results. In some instances, the SRP refers to the “information submitted” (e.g., 3.4.3.7 criteria for Completeness and Consequences), while in other cases the SRP refers to the “ISA documentation” (e.g., 3.4.3.7 criteria for Likelihood) or the “ISA results.” A clear definition of the differences in the ISA documentation, the ISA results, and the ISA summary (information submitted with the application) must be made and strictly followed if this section is to be useable by the reviewer.

Paragraph 3.4.3.7.b.i. Consequences

This paragraph implies that each accident with a radiological or chemical consequence must have a quantitative dose calculated. This is unnecessary for determining the risk associated with the accident sequence. A qualitative assessment that brackets the exposure into appropriate consequence categories is sufficient to identify the items relied on for safety to prevent or mitigate the accident.

Quantitative Likelihood Criteria

The last paragraph of this section indicates that summing the frequencies of all accidents in the facility is required to show compliance with the likelihood criteria of 70.61. This is not appropriate and is in sharp contrast with the discussion in the Completeness Criteria, which recognizes that the purpose of the ISA is to “assure that existing safety controls are adequate.” The Completeness Criteria permits accidents having similar characteristics to be grouped. The level of grouping directly affects the total number of accidents listed in the ISA documentation, and simply summing the number of accidents could give a false indication of the safety of the licensed facility. The items relied on for safety and their concomitant reliability and availability are the true measures of safety.

Concurrency

This paragraph states that if a non-quantitative method is used for likelihood determination, that a method for evaluating concurrency of control failures **must** be used. This is not accurate. Each control in an accident scenario must be evaluated for its “robustness” which includes the ability to detect and correct its failure. This does not mean however that a method to evaluate the likelihood of concurrent failures is **required**. The management measures to assure reliability and availability of controls dictate detection criteria for control types consistent with their reliability. For example, passive engineered controls may only need verification at installation, and then after repair or maintenance, while active engineered controls may need frequent, periodic calibration. If the controls in an accident sequence are truly independent and not subject to common mode failure, then their likelihood of concurrent failure is purely random, and any attempt to evaluate the concurrency has little meaning. What is important is identifying the management measures required to “qualify” the controls as acceptable, having the appropriate level of assurances to provide the needed reliability and availability.

Chapter 4.0 Radiation Safety

4.3 Item 2. Organizational Relationships and Personnel Qualifications

This section is redundant and should reference Chapter 2. Specifics should be put in Chapter 2.

Item 4. Training

Training aspects should be prescribed in Section 11 and just referenced in this section.

Item 5. Ventilation Systems

Remove the word “design” and replace with “requirements for.”

Item 6. Air Sampling

This section is too prescriptive, ex. “specific calculations for concentrations and levels,” This level of detail is better suited to an NRC inspector’s program evaluation procedure.

Item 13. Integrated Safety Analysis

The statement ...”a review of **all** accident sequences that result in worker radiation exposures of concern before controls are applied,” will be too time consuming and burdensome, only a sampling of the sequences should be required.

4.4.2 Organizational Relationships and Personnel Qualification

This section is redundant and should reference Chapter 2. Specifics should be put in Chapter 2.

4.4.4 Training

This section is redundant and should reference Chapter 11. Specifics should be put in Chapter 11.

4.4.13 ISA

Description looks like ISA Summary Review. This reference to SRP Section (should say Chapter) 3 is good, other sections should reference other chapters in this manner and reduce numerous redundancies.

Chapter 5.0 Nuclear Criticality Safety

5.4.2

Change the reference from ANSI/ANS8.1-1983 to ANSI/ANS8.1-1998, since the newly revised standard has been issued.

5.4.3.3.1

The reference to paragraph 2.4.1 should be 2.4.3 to specifically call out the acceptance criteria section.

5.4.3.1.5

It is inappropriate to require a posting for the undefined terms (areas, operations, workstations, and storage locations). The language implies that “conformance and safe operation” can be insured by a posting that may or may not have all the NCS controls listed. Postings are useful on a case by case basis but should not be required for every fissile operation. The words “as appropriate and necessary” should be added after the word “postings” in this paragraph.

5.4.3.1.6

Using a double negative with “...no further action not...” makes the wording confusing. Change the wording to “All personnel shall report defective NCS conditions to their supervision as well as to the NCS function (either directly or through their supervision), and shall perform actions only in accordance with approved plant procedures until the NCS function has analyzed the situation.”

5.4.3.2.1

This section refers to SRP 11.4 which commits to performing “needs analysis” to determine who gets what training. Such analysis, according to industry training program practices may not be necessary or appropriate for fuel cycle facility operations.

5.4.3.2.1.d

Using a double negative with “...no further action not...” makes the wording confusing. Change the wording to “All personnel shall report defective NCS conditions to their supervision as well as to the NCS function (either directly or through their supervision), and shall perform actions only in accordance with approved plant procedures until the NCS function has analyzed the situation.”

5.4.3.2.3.b

The weekly time interval for NCS walk throughs is a huge administrative burden with no apparent basis. Change the wording to “...all operating SNM processes and storage areas should be reviewed at least every month.”

5.4.3.2.3.c

This section refers to SRP 11.4 through 11.9. SRP 11.7.4.3.4 requires audits or assessments to be performed using written “procedure and checklists”; the “and” should be changed to an “or” since both should not be required and either is an appropriate tool. In addition, audits and surveillances should assess a sampling of management measures from every potentially fissile operation. It may not be possible to audit 100% of every control every 2 years as some operations may not even be performed that frequently (e.g., some maintenance controls).

5.4.3.3.1.3

Requiring the listing by date and revision number of the validation report would not allow timely updating of the validation report when new data needs to be incorporated. Delete “...(including date and revision number)...” from the paragraph.

5.4.3.3.1.3

Strict adherence to this is impractical since “NCS determinations” could include a very broad set of engineering calculations, such as thermodynamics, heat transfer, general physics, nuclear kinetics, etc. The QA programmatic process of independent technical reviews will ensure that valid techniques are utilized (with the exception of validation of k_{eff} code calculations, which require validation). Change “...NCS determinations” to “...an estimate of k_{eff} .”

Chapter 5, continued

5.4.3.3.1.3.d

The term “proper functioning of mathematical operations” is very vague. Change this paragraph to say that mathematical relationships will only be used within the context of their fundamental assumptions and limitations.

5.4.3.3.1.3.f

Change “...plant specific benchmark experiments...” to “benchmark experiments that cover the intended ranges of applicability...” This is the intent of validation of a computer code.

5.4.3.3.1.3.g

The SRP does not adequately define “uncertainty in the data.”

5.4.3.3.1.4.f

Change “...plant specific benchmark experiments...” to “benchmark experiments that cover the intended ranges of applicability...” This is the intent of validation of a computer code.

5.4.3.3.1.4.g

The SRP does not adequately define “uncertainty in the data.”

5.4.3.3.2.1

It should be recognized that a physical design feature or item could provide two separate and independent safety functions. For instance, an over pack could conceivably provide spacing and geometry control. These functions could be independent and separately unlikely to fail, therefore they could satisfy double contingency. The interpretation of “NCS control” should allow for this interpretation.

5.4.3.3.2.4

Heterogeneity is a parameter among many that affect reactivity. If heterogeneity results in the most reactive condition and it is ignored, then the licensee has failed to meet 5.4.3.3.1.6.a where analysis of “optimum” conditions was required. Therefore this paragraph should be deleted.

5.4.3.3.2.6

This paragraph requires that a controlled parameter be maintained during both credible normal and abnormal conditions. If “abnormal condition” is misinterpreted to mean a deviation from safe operating conditions, this requirement is in error since by definition, a deviation from safe operating conditions is loss of control over a controlled parameter such that the parameter is outside its established safety limits. A definition of “abnormal condition” appears to be needed.

5.4.3.3.2.9.b

This statement appears to describe geometry control and should be deleted from the discussion on mass control.

5.4.3.3.2.9.d & e

These “rules of thumb” for acceptable mass limits have historically been applied to critical data or handbook values, and apply only to single parameter limits. Mass limits derived by other methodologies, e.g., computer code calculations, do not necessarily need these margins applied to obtain safe operating limits. These requirements should be clarified.

5.4.3.3.2.10.b

These “rules of thumb” for acceptable geometry limits have historically been applied to critical data or handbook values, and apply only to single parameter limits. Geometry limits derived by other methodologies, e.g., computer code calculations, do not necessarily need these margins applied to obtain safe operating limits. These requirements should be clarified.

5.4.3.3.2.13.a

The methodologies of Section 5.4.3.3.1 may be able to show that different distances to reflection materials are safe, and therefore the requirement for one-foot separation is arbitrary and not needed.

Chapter 5, continued

5.4.3.3.2.14.e

The statement in this section for dual independent sampling is redundant with the wording in 5.4.3.3.2.8 for the use of instrumentation, and is not needed. Sampling is no more important for moderation than it would be for enrichment, concentration, density, or any other parameter where instrumentation is used for measurements.

5.4.3.3.2.15.b

The statement precluding high concentrations is arbitrary and without basis. If the NCS analysis demonstrates safety for a range of concentrations, including “high” concentrations, but requires reliable controls for “higher” concentrations, then the safety basis for the operation is adequate.

5.4.3.3.2.15.c

The term “normally closed” should be changed to “normally isolated from equipment and systems with concentrations above safe limits.”

5.4.3.3.2.15.d

The statement in this section for dual independent sampling is redundant with the wording in 5.4.3.3.2.8 for the use of instrumentation, and is not needed. Sampling is no more important for concentration than it would be for enrichment, moderation, density, or any other parameter where instrumentation is used for measurements.

5.4.3.3.2.16.a

The statement in this paragraph does not allow for control other than by passive engineered means regardless of the results of the ISA. This is not consistent with a risk-informed approach. Reword this paragraph to say “...engineered devices (i.e., spacers) with a minimum spacing is the preferred approach but augmented administrative spacing (e.g., visible markers with appropriate spacing) is acceptable when justified in the ISA.”

5.4.3.3.2.18.a

The statement “...and engineered devices should limit accumulation of SNM” does not describe volume control and should be deleted.

5.4.3.3.2.18.b

Since volume measurements may be obtained by various methods including, but not limited to, instrumentation this statement should be revised to read “...the measurement is obtained by using either instrumentation or a calibrated volume device.”

5.4.3.3.3

The SRP should be revised to specify only the criteria of the regulation (10CFR70.24), the ANSI/ANS8.3 standard, and the regulatory guidance (3.71). The additional criteria currently in the SRP are not appropriate and should be deleted.

5.4.3.3.4.10

The statement “...controls and control barriers...” should be changed to “...controls or control barriers...” consistent with 5.4.3.3.4.9.

5.4.3.3.4.12

This statement implies a need to perform multi-parameter sensitivity analysis, which is not clearly defined and is far in excess of current industry practice.

5.5.1

The citations for regulatory requirements in this paragraph are not consistent with those in 5.1.

Chapter 6.0 Chemical Process Safety:

1. General Comments: The SRP section should be revised to eliminate inconsistencies with March 22, 1999 Proposed Revisions to 10 CFR 70 submitted by NEI. Specifically, references to “Hazardous Chemicals” should be changed to “Hazardous chemicals produced from licensed materials”. This item is specifically defined in the proposed regulation. In addition, discussions of other hazardous chemicals not produced from licensed materials should be clarified to state that these chemicals are only of concern if they effect radiation safety or nuclear criticality safety. An alternative would be to eliminate the discussion of other hazardous chemicals not produced from licensed materials from the SRP section completely and discuss these chemical hazards as part of the Integrated Safety Analysis.

It is important to make this distinction since these other hazardous chemicals are outside the scope of the NRC’s responsibility.

Chapter 7.0 Fire Safety

1. Section 7.1 Opening Paragraph; Insert “which could affect the safety of licensed materials and thus present an increased radiological risk” in the phrase.....fire and explosion risks (insert) and provided mitigative systems.... This is necessary to insure the fire safety analysis is limited to the scope described in the proposed Part 70 revision.
2. Section 7.4.3.1 First Paragraph, Second Sentence; Delete the phrase “fire safety awareness among employees is maintained, transient ignition sources and combustibles are controlled, and the facility maintains a readiness to extinguish or limit the consequences of fire.” This wording is too prescriptive. The fire safety controls, administrative and engineered, should be based upon the results of the ISA not a prescriptive list of programs.
3. Section 7.4.3.1 First Paragraph Last Sentence; Management controls should be moved to Section 11 of the SRP. The management controls related to fire safety are no different than those related to the other safety disciplines.
4. Section 7.0 General Comment; The SRP section consistently makes reference to NFPA 801. This code may not be appropriate to facilities constructed prior to the 1970 edition of NFPA 801 that first included fuel cycle facilities. In addition, fire safety controls should be based upon the outcomes of the ISA. The specific references to NFPA 801 code requirements should be removed to eliminate confusion.
5. Section 7.4.3.5 First Sentence; This sentence states the application should document the fire detection, alarm, and suppressions systems and emergency response organizations provided for licensed facilities. Although the application should have a general description of the types of fire protection systems at the site, the actual listing of the systems would be more appropriately contained in the ISA summary.

Chapter 8.0 Emergency Management

1. General Comment: The proposed SRP is very prescriptive and required the Emergency Plan to include details not required by Regulatory Guide 3.6.7. Specifically:
 - a. The SRP requires, “Hazardous materials normally onsite, by location, (use and storage) and building, and hazardous characteristics (exposure rates, PH, temperature, and other

Chapter 8, continued

characteristics) important to emergency management.” to be listed in the Emergency Plan.

These materials are generally outside the scope of NRC’s regulatory authority unless they meet the definition of “hazardous chemicals produced from licensed materials.” In addition, the inclusion of this type of detailed information in the Emergency Plan would require frequent plan changes to be submitted to the NRC since new chemicals are frequently brought into the plant or moved to new locations.

- b. The SRP requires, “each accident identified by the ISA for which protective actions maybe needed” to be listed in the Emergency Plan.

The statement should be reworded to require a description of the types of accidents identified by the ISA for which offsite protective action may be needed.

- c. The SRP requires, “Figure(s) projecting dose and toxic substance concentrations is a function of distance and time for various meteorological stability classes” to be included in the Emergency Plan.
- d. The SRP requires, “Use of team training and the estimated hours of initial training and retraining” be included in the Emergency Plan.

The reason for the significant changes in the information required in the Emergency Plans is unclear. Have there been recent incidents that indicate the licensee’s current plans are inadequate? On the contrary, NNFD has been told in License Performance Reviews that the Emergency Plan is adequate. Therefore, the NRC should provide a justification for this increase regulatory burden that appears to have no value added.

Chapter 9.0 Environmental Protection

General- chapter 9 is exceedingly long mainly because it is overly prescriptive. The acceptance criteria should be more general.

9.3.2 The SRP should focus on environmental data and reviews only as they relate to radiological issues. Non-radiological release information on purely chemical hazards should not be required.

9.4.1 This section appears to just be a repeat of regulation.

Chapter 10 Decommissioning

No comments

Chapter 11 Management Control Systems

11.0 This section should be renamed “Management Measures” to be consistent with the rule.

It appears that separating this chapter into eight subchapters leads to a level of prescriptiveness that is unnecessary. The industry has consistently protested the imposition of significant new programs and programmatic requirements. While the license application clearly needs to contain commitments regarding management measures that will be applied to an item relied on for safety when necessary, the way the SRP is currently written implies significant programmatic changes at fuel facilities which are not warranted. We recommend that section 11 be consolidated to reduce the prescriptiveness and redundancy.

Chapter 11, continued

11.1. This section is far too verbose for the objective. Through the 10CFR70 rulemaking process we have stated that the license application should contain commitments necessary to assure the ISA is maintained. That would seem to be the objective of the CM program. Inclusion of document control & assessment seems to be repetitive and are also covered in 11.8 and 11.6, respectively.

Design reconstitution seems out of place in the CM portion of the SRP. CM traditionally assumes that adequate baselines exist. The entire objective of the 10CFR70 rulemaking is to complete and maintain an ISA. Completion of the ISA will provide adequate baseline thus discussion of reconstitution is unnecessary.

11.2. This section prescribes a maintenance program, which is not warranted at fuel facilities. The fact that the rule requires items relied on for safety to be maintained to ensure availability and reliability should not be interpreted to require or imply description of a prescriptive maintenance program in a license application. The ISA will determine the maintenance requirements for each engineered item relied on for safety based upon the risk of its' failure and the particular scenario.

The acceptance criteria are far too prescriptive. Many of the criteria listed are far beyond what NRC reviewers need to assure an adequate level of safety. This level of prescriptive detail has not been previously required in a license application and should not be through this rulemaking. NRC should not make this rulemaking to implement the performance of an ISA into an opportunity to dramatically expand the content of a license application.

11.3. Quality assurance is not traditionally thought of as subset of management measures. In fact, a QA program generally includes discussion of those management measures described in 11.1-2 and 11.4-8 as well as others. This SRP section is out of place and not necessary. This is best highlighted by the list of 19 "attributes" of a QAPD described in 11.3.4.3. Of the 19 listed, the following redundancies exist with other subsections of 11.0.

| <u>Attribute</u> | <u>SRP Chapter</u> |
|------------------|--------------------|
| 5 | 11.5 |
| 6 | 11.1 |
| 9 | 11.2 |
| 18 | 11.6 |
| 16 | 11.7 |
| 17 | 11.8 |

Section 11.3.4.3, #2 clearly states the applicant is to commit to one of the QA programs described in 11.3.4.2. NRC staff has stated at several public meetings that imposition of a QA program like NQA-1 is not necessary to comply with the rule. This section is contrary to those statements and highlights the industry sensitivity to the implied requirement to implement an NQA-1 type program at facilities where the risk to the public health and safety is inherently low.

11.4. The level of prescriptive requirements is beyond what is currently found in fuel cycle license applications. This imposition of requirements outside the rule-making process is inappropriate.

Training programs should be in-line with the requirements of 10CFR19 and with those operator actions necessary to assure items relied on for safety are available and reliable. This is accurately stated in 11.4.1. The contents of 11.4.3. and 11.4.4 go well beyond the level of information that should be required in a license application and impose new training program requirements, which must be described in the application.

11.5. The areas of review in 11.5 seem appropriate. The acceptance criteria, however, go into great prescriptive detail, which is not necessary. Examples where the acceptance criteria is overly prescriptive are:

- 11.5.4.3 #2
- 11.5.4.3 #5

Chapter 11, continued

- 11.5.4.3 #7 (listing is excessive)
- 11.5.4.3 #8 (should be in 11.7)
- 11.5.4.3 #9
- 11.5.4.3 #12

- 11.6 This section provides a reasonable level of review for audit and assessment programs that would be described in a license application. Section 11.6.4.3 is clearly a maximum level of prescription necessary in a SRP. This section could be used as a model for editing other subsections of Chapter 11.
- 11.7 This subsection provides a reasonable level of review guidance. The focus on teams and independence, while necessary for large events, may be overly prescriptive for minor events. Licensees should have the ability to graded levels of teams depending upon the severity of the incident.
- 11.8 This section provides a reasonable level of review for record retention programs described in a license application.