PR 40 and 150
(76FR28336)

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Ms. Annette L. Viette-Cook
Secretary
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Washington, DC 20555-0001
ATTN: Rulemakings and Adjudications Staff

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Your ref:
Our ref: LTR-RAC-11-39

Date: June 28, 2011

SUBJECT: Comments on Proposed Rule Language, 10 CFR Parts 40 and 150 "Domestic Licensing of Source Material –Amendments/Integrated Safety Analysis", (RIN 3150-A150) Docket ID NRC-2009-0079

Dear Ms. Viette-Cook:

Westinghouse appreciates the opportunity to provide comments on the Proposed Rule Language, "Domestic Licensing of Source Material –Amendments/Integrated Safety Analysis," which was published in the *Federal Register* on May 17, 2011 (76 FR 28336).

Westinghouse is concerned with the proposed revision to require an additional evaluation criterion in § 40.84(b) for chemical hazards. This criterion is not currently required for any fuel cycle facility, and Westinghouse believes that this regulatory change is not necessary to address the safety of radioactive materials and thus the radiation risk to workers or members of the public. Specific comments on the proposed amendment by section are provided within Appendix A of this correspondence. Westinghouse further requests NRC to conduct public meetings during the comment resolution period of this proposed rule to provide feedback to stakeholders.

If you have any questions, please contact me at (803) 647-2045.

Sincerely,

Gerard F. Couture, Manager
Licensing and Regulatory Programs
Westinghouse Columbia Fuel Fabrication Facility
Docket 70-1151 License SNM-1107

Attachment: Appendix A

cc: U. S. Nuclear Regulatory Commission, Region II,
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Attn: Christopher Ryder, Project Manager

APPENDIX A

1. Comment on the following **§ 40.4 Definition**:

Defense-in-depth practices means a design philosophy, applied from the outset and through completion of the design, that is based on providing successive levels of protection such that health and safety will not be wholly dependent upon any single element of the design, construction, maintenance, or operation of the facility. The net effect of incorporating defense-in-depth practices is a conservatively designed facility and system that will exhibit greater tolerance to failures and external challenges. The risk insights obtained through performance of the integrated safety analysis can then be used to supplement the final design by focusing attention on the prevention and mitigation of the higher-risk potential accidents.

Please remove the sentences "*The net effect of incorporating defense-in-depth practices is a conservatively designed facility and system that will exhibit greater tolerance to failures and external challenges. The risk insights obtained through performance of the integrated safety analysis can then be used to supplement the final design by focusing attention on the prevention and mitigation of the higher-risk potential accidents.*" This information is more appropriately contained within the proposed companion NUREG-1962 as it is not a definition, but rather an explanation of the defined term.

2. Comment on the following **§ 40.4 Definitions**:

Items relied on for safety mean structures, systems, equipment, components, and activities of personnel that are relied on to prevent potential accidents at a facility that could exceed the performance requirements in § 40.81 or to mitigate their potential consequences. This does not limit the licensee from identifying additional structures, systems, equipment, components, or activities of personnel (*i.e.,* beyond those in the minimum set necessary for compliance with the performance requirements) as items relied on for safety.

Please insert management measures and controls into the first sentence in locations shown: "...components, management measures, and activities of personnel that are controls relied on"... A lessons learned from 10 CFR Part 70 implementation is that procedure management measures are routinely accepted by NRC staff as appropriate for designation as an Item Relied on For Safety, but that is not always the case for other management measures. In cases where a specific application of a management measure provides the best available and reliable means to prevent or mitigate an accident sequence, such a designation should not be precluded by the regulatory framework.

The introduction of the term controls is consistent with § 40.82(d) current wording; "Each applicant or licensee must establish management measures to ensure compliance with the performance requirements of § 40.81. The measures applied to a particular engineered or administrative control or control system may be graded commensurate with the reduction of the risk attributable to that control or control system. The management measures must ensure that engineered and administrative controls and control systems that are identified as items relied on for safety pursuant to § 40.81(d) are designed, implemented, and maintained, as necessary, to ensure they are available and reliable to perform their function when needed, to comply with the performance requirements of § 40.81."

An example of a management measure is an inspection required prior to placing a piece of equipment in service which can only be inspected upon receipt. Such receipt inspections are routinely performed by licensee Quality Assurance staff and are an integral part of a quality program. An example of a control is an automatic isolation valve activated by an instrument monitoring loop upon reaching an established set point value.

3. Comment on **§ 40.4 Definitions**:

A definition of "Credible" should be added to this section which is consistent with the historical usage in industry and existing guidance provided by national consensus standards. Another option would be to utilize the definition provided in Department of Energy guidance documentation for 10 CFR 830. (i.e. 10E-6). Many subsequent sections have regulatory wording that applies to "credible" hazards or accidents and yet the term is not defined within the regulation.

4. Comment on **§ 40.4 Definitions**:

A definition of "Control" should be added to this section which is consistent with the historical usage in industry and existing guidance provided by national consensus standards. This will avoid confusion regarding what constitutes a control and will allow NRC and the licensee to differentiate between the process described and analyzed as part of the process safety information required by **§ 40.82(b)** and those controls necessary to be identified as Items Relied on For Safety. Many subsequent sections have regulatory wording that applies to "control" of hazards or accidents and yet the term is not defined within the regulation.

5) Comment on **§ 40.81(e)(2):**

Please remove from the first sentence "and conspicuously posts and maintains notices stating" and reword sentence to state:

(2) Provides training to these individuals that satisfies the requirements of § 19.12(a)(1) through (a)(5) of this chapter and ensures that they are aware of the risks associated with accidents involving the licensed activities as determined by the integrated safety analysis, including where these individuals may examine the information contained in § 19.11(a) of this chapter.

Mandating postings, which many consider the least effective training and familiarization tool, results in an administrative burden. Also the term "conspicuously" is subjective and therefore reliant on interpretation. If postings are indeed the appropriate training tool then the licensee is in a better position to make that determination based on particular circumstances. Not all licensees should be forced to utilize postings where they deem them as an ineffective training and notification mechanisms. There are numerous methods available to better inform and disseminate information. Postings are but one such method and thus allowance for posting is more appropriately contained within the proposed companion NUREG-1962.

6) Comment on **§ 40.81(b) & (c):**

The performance requirements contained with this section should provide allowance for the treatment of Standard Industrial Hazards within the programs used by the licensees in accordance with existing OSHA programs. Such programs are used to preclude dermal exposures based on the use of properly identified and utilized Personnel Protective Equipment without the extensive burden placed upon the licensee of such techniques being subject to interpretation as an Item relied on for safety. This will preclude the administrative burden of extensive management measures and documentation required for Items Relied on For Safety with no increase in safety protection for workers.

This comment can be addressed by rewording sections§ 40.81(b)(4) &(c)(4) to include the term "inhalation" so that they read "(4) An acute chemical exposure from inhalation by an individual....."

The basis for this is already provided in the Discussion section III H&I (76FR238340) in that consensus standard upon which a licensee can make a determination of high or intermediate consequences exist for inhalation of toxic chemicals as they can be based on ERPGs or AEGLs. No such consensus standards are available for dermal exposures and any such determination is highly subjective. The best approach to ensure safety of the workers is for the licensee to properly identify, have available for use, and ensure proper wearing of PPE.

7) Comment on **§ 40.82(c)(1)(iii):**

This section should be reworded to state:

"(iii) Facility hazards that could affect the safety of licensed materials and thus present an increased radiological risk; "

The proposed rule wording pertaining to hazardous chemicals will result in subjective interpretation by NRC staff. It will also increase the administrative burden on licensees subject to both Part 70 and the proposed Part 40 as the requirements are different. Any potential hazard which is chemical in nature that could affect the safety of licensed materials, and thus under NRC jurisdiction, will have already been addressed in the Integrated Safety Analysis generated under Part 70. To introduce wording that conflicts with the currently established regulatory wording requires further justification than that provided in Section III F Discussion (76FR2839) where a statement is provided that "The NRC believes that chemical quantities .....and do affect the safety of radioactive materials....". This statement can be interpreted as a non-validated assumption. The proposed regulatory requirement appears to conflict with NRC's legal authority and historical role in regulating radioactive materials requires. Prior to any such expansion of its jurisdiction, NRC should clearly document the basis for its belief.

8) Comment on **§ 40.82(c)(3)(i-v):**

These sections do not adequately address those existing licensees who have already performed Integrated Safety Analysis and have NRC approved Integrated Safety Analysis Summaries in accordance with Part 70 who will also be required to address the proposed Part 40 regulation.

Provisions should be established to:

a) Eliminate the need to submit a plan for review and approval under (i) which is an undue administrative burden, and

b) In place of (ii) and (iii) of this section as worded, such licensees should be allowed to submit any changes required over a two to three year period in accordance with the requirements of10 CFR 70.72(d) where the change identified is the result of changes in analysis required by the proposed Part 40.

c) Further, utilization of any performance deficiency corrective options allowed by (iv) and (v) of this section should also include relief from reporting requirements of Part 70 for issues identified as the result of changes in analysis required by the proposed Part 40.

9) Comment on **§ 40.85 (a) (b) &(c):**

Changes reflected in Comment 8 also need to be reflected in this section for those existing licensees who have already performed Integrated Safety Analysis and have NRC approved Integrated Safety Analysis Summaries in accordance with Part 70 who will also be required to address the proposed Part 40 regulation.

10) Comment on **§ 40.86 (c) (4):**

Reword this section so that it states:

(4) Alter the safety attributes of any item relied on for safety, listed in the integrated safety analysis summary, that is the sole item preventing or mitigating an accident sequence that exceeds the performance requirements of § 40.81; or

Minor alternations can be made that have no bearing on the safety function for which NRC needs to be made of aware of and approve. Some examples are an upgraded part number for the same component provided by the same manufacturer, removing or modifying an instrument indication device or current output in a parallel circuit or instrument loop that is not used in the circuit which provides the safety function. As currently worded, painting a section of a passive piece of equipment that is a sole item preventing or mitigating an accident sequence would not be allowed without obtaining NRC pre-approval. This is an excessive administrative burden on the licensee.

11) Comment on **§ 40.88 (b) (4):**

Reword to state:

(4) Any natural phenomenon or other external event, including fires internal and external to the facility that has affected the intended safety function or availability or reliability of one or more items relied on for safety.

The subjective term "may" has been removed from above suggested text as too unclear and subject to extremes in interpretation. A fire anywhere near a given site can unrealistically be considered in a "may"

statement to spread and eventually impact the structure and equipment inside that structure. Since an uncontrolled fire not contained within a given amount of time is already reported to NRC under the emergency plans, this subjective criterion is unnecessary and potentially can result in violations based solely on interpretation. The licensee is in the best position to determine if a natural phenomenon or fire event actually impacts an IROFS safety function. That would be the appropriate time to report such an occurrence to the NRC if not already reported under the emergency preparedness program.

12) Comment on **§ 40.86 (c):**

This section should be reworded to take into account the lessons learned from the Part 70 implementation. After several reports on this criteria for non-radiological related items, NRC issued guidance in FCSS ISG-12, Rev. 0 (ML102020267) that clarified what reports were actually necessary to make under the comparable provision in Part 70. This should be included in this rulemaking to eliminate the necessarily of issuing guidance for new rulemaking. This section of the rule should be written clearly to identify this section applies to NRC licensed materials or hazardous chemicals produced from licensed materials. NRC does not need to be informed if a permit daily limit for Total Suspended Solids is exceeded for an onsite Sanitary Waste Treatment System, under the current wording that is a real potential.

Rulemaking Comments

From: Couture, Gerard F. [CouturGF@westinghouse.com]
Sent: Wednesday, June 29, 2011 6:30 AM
To: Rulemaking Comments
Cc: Ryder, Christopher; Thomas, MaryLynne
Subject: Docket ID NRC-2009-0079
Attachments: LTR-RAC-11-39.pdf

Attached please find comments on the proposed rule language for 10 CFR parts 40 and 150, Domestic Licensing of Source Material – Amendments/Integrated Safety Analysis.

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