



PR 72, 74 and 150
(76FR28193)

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OFFICE OF SECRETARY
RULEMAKINGS AND
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Ms. Annette L. Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ATTN: Rulemakings and Adjudications Staff

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Your ref:
Our ref: LTR-RAC-11-43

Date: June 28, 2011

SUBJECT: Comments on Preliminary Rule Language, "Amendments to Material Control and Accounting Regulations," Docket ID NRC-2009-0096

Dear Ms. Vietti-Cook:

Westinghouse appreciates the opportunity to provide comments on Preliminary Rule Language, "Amendments to Material Control and Accounting regulations," which was published in the *Federal Register* on May 16, 2011 (76 FR 28193). We appreciate the U.S. Nuclear Regulatory Commission (NRC) providing an early opportunity for input on this important rulemaking.

Westinghouse is concerned with the substantive proposed changes in the absence of a clear safety or security concern. The proposed changes to the rule will have a significant impact on Category III fuel cycle facilities. Further, the timing and schedule for this rulemaking and its implementation needs to be fully addressed. It is also uncertain what the safety or security basis is for such a change. Material attractiveness should be taken into account in the rule language. Significant impacts in facility equipment upgrades and staffing levels are anticipated should this rulemaking proceed as proposed. Specific comments on the proposed amendment by section are provided within Appendix A of this correspondence. Westinghouse further encourages NRC to conduct public meetings during the comment resolution period of this proposed rule to provide feedback to stakeholders on the comments received and the proposed resolutions.

Westinghouse completed an engineering study and developed a preliminary cost estimate of the impact this preliminary rule implementation will have on the Columbia Fuel Facility in support of our comments. The details are proprietary in nature and are therefore provided in a separate correspondence, LTR-RAC-11-44. 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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Atlanta, Georgia 30303-1257

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APPENDIX A

General Comments:

1) The new rule would eliminate the following exemptions for items from item control that are in the current regulations. This would result in requiring scales and item control terminals where none exist today and require tracking of process samples. This has extensive implications for the factory.

- Items that will not exist for more than 14 days
- Items containing less than 500 grams U-235 for all such items exempted totaling less than 5kgs of U-235

The above comment is based on the proposed definition of item control system unnecessarily including “all” items. It is unclear what regulatory problem is being addressed, and reflects a fundamental change in MC&A which will encompass a large number of process samples, including short lived samples and items that do not exist for more than 14 days. Laboratory samples and other short-lived items should remain exempt and the current provisions under 74.31(c)(6) and 74.43(b)(6) should be retained.

2) Requirements for use of the “Two Man Rule” ; (Two individuals qualified and authorized to perform activity where one performs activity and the other verifies and attests that the container, item, tamper seal, movement etc. being acted upon are correct and that the recording of the activity is performed accurately)

This will require a significant number of additional employees on all shifts. It will also require additional MC&A staff to support. This section is also written too broadly (appears to apply to all tasks covered by the rule, such as 741 data entry) and if retained, should only apply to actual movement and transactions related to SNM. NRC has previously considered the fuel cycle facility fleet diversity in the context of MC&A and ruled out application of the two person rule for SNM of less strategic importance (i.e. specifically documented in Regulatory Guide 5.80). NRC should recognize in the regulatory analysis the impact to support the significant costs involved to reflect and store the second person’s MC&A input. Two person rule would apply to the following:

- Applying tamper seals
- Item verification at Physical Inventory
- Material Transfers between Material Balance Areas (MBAs) and Material Transfers between Item Control Locations (ICLs)

Specific Comments:

1. Comment on the following § 74.4 Definition:

Custodian means an individual authorized and qualified by the licensee who maintains the accounting system, and who is responsible for controlling the movement of all special nuclear material into, out of, and within the material balance area.

Please remove from this definition “*who maintains the accounting system, and*” so that it reads:

Custodian means an individual authorized and qualified by the licensee who is responsible for controlling the movement of all special nuclear material into, out of, and within the material balance area.

The custodians under the current programs are the line production managers and/or area managers whose personnel are the hands on production operators responsible for the manipulation and transactions associated with the processing and movement of SNM. The production workers are not the personnel who maintain the accounting system; they merely perform data entry or manual entries into that system. To make the custodians responsible for the accounting actually would result in a decrease in the effectiveness of the existing control and oversight scheme employed. The accounting system is the responsibility of the MC&A organization, which for the Westinghouse facility is in the Environmental Health and Safety department and is an independent organization.

2. Comment on the following **§ 74.4 Definition**:

Accounting means a system which documents the quantities of special nuclear material held on current inventory by the licensee, and includes tracking of receipts, shipments, and measured discards; and transfers of special nuclear material into, out of, and within the controlled access area.

Please either remove “within the controlled access area” or reword to state “between Material Balance Areas (MBAs)” which is the likely the intent of this portion of the definition. This would make it consistent with the historical usage of MBAs and tracking of SNM at DOE facilities and perhaps Category I facilities. A demarcation that is clearly distinguishable is necessary in order for the licensee to satisfy the performance requirements objectives outlined in the rule changes.

3. Comment on **§ 74.4 Definitions**:

The distinction and intended usage of the Material Balance Area and Item Control Area are unclear.

It would be beneficial to utilize only the term Material Balance Area and to combine the definitions where needed. Alternately, NRC may wish to consider simply employing a revised definition of Material Access Area to accomplish the objective of these definitions and subsequent use in the proposed regulation.

For the combined definition, the following is suggested wording:

Material Balance area (MBA) means a designated administrative or physical area within the Material Access Area, in which the control of special nuclear material is such that at any time, a count of the items and the material quantity being moved into, out of, and within the MBA, is known using the accounting system. The material quantity is an assigned value based on measurements of both the element content and the isotopic content.

4. Comment on **§ 74.4 Definitions**:

The utilization of the historically understood meaning of a material control and accounting program to introduce elements of asset (equipment) control is inappropriate. Equipment is normally controlled by asset management and configuration control programs which are separate to and distinct from the material control and accounting of SNM. Performance requirements necessary to ensure the proper asset control, engineering design control and export requirements of equipment capable of producing enriched uranium are certainly within the national interest. However, this is not the appropriate place for equipment asset controls. The stated purpose of the Part 74 regulations includes;

§ 74.1 Purpose. (a) This part has been established to contain the requirements for the control and accounting of special nuclear material at fixed sites and for documenting the transfer of special nuclear

material.Requirements for the control and accounting of source material at enrichment facilities are also included.”.

If deemed necessary to include in the regulation, the following is a suggested rewording:

Material control and accounting (MC&A) means a program to control and account for certain types of nuclear material used at a licensed facility, including special nuclear material and source material. The purpose of an MC&A program is to prevent and detect any loss, theft, diversion, or unauthorized utilization of nuclear material.

5) Comment on § 74.31(b):

The value added by changing the fundamental nuclear material control (FNMC) plan to an MC&A plan is unclear. Further, the FNMC terminology is embedded throughout existing license documents, training programs, procedures and commercial contracts. In the absence of an obvious safety or security benefit, the expenditure of resources required in processing these changes is an unnecessary and costly administrative burden.

6) Comment on § 74.31(c)(5):

Throughout the rule, NRC is adopting overly prescriptive inventory requirements by changing the frequency from months to days. Existing licensee practices to inventory during certain months of the year are effective. The preliminary rule language does not afford any flexibility and does not take into account special circumstances (including leap years) and represents a shortening of the time allotted to complete the inventory. Thus, in order to ensure that the 370 day cycle is met; the licensee may have to short cycle the calendar date of the performance of the physical inventory. NRC should either retain the current inventory requirements or add 31 days to the dates in the rule.

7) Comment on § 74.31(c)(6):

The definition of item control system unnecessarily includes “all” items. It is unclear what regulatory problem is being addressed, and reflects a fundamental change in MC&A which will encompass a large number of process samples, including short lived samples and items that do not exist for more than 14 days. Laboratory samples and other short-lived items should be exempt from this requirement or the current provisions under 74.31(c)(6) should remain as is.

8) Comment on § 74.31(c)(9):

The applicability of this part of the regulation must clearly be understood in terms of what the threshold is for application of tamper-safeing. With the terminology proposed using “all” this would apply for example to a small test sample of one-three pellets of low enriched uranium. What is the safety or security basis for such an application?

9) Comment on § 74.31(c)(10):

The applicability of this part of the regulation must clearly be understood in terms of what the threshold is for application of two man rule. With the terminology proposed using “all” this would apply for example to a small test sample of one-three pellets of low enriched uranium. What is the safety or security basis for such an application?

10) Comment on § 74.31(c)(11):

Suggest rewording this section to address the results of the changes proposed in the definitions, which recommends utilization of only material balance areas.