



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 8, 2001

OFFICE OF THE
SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-01-0066

TITLE: PROPOSED RULE: MATERIAL CONTROL AND
ACCOUNTING AMENDMENTS

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of May 8, 2001.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield
OGC
EDO
PDR

VOTING SUMMARY - SECY-01-0066

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. MESERVE	X				X	5/1/01
COMR. DICUS	X				X	4/30/01
COMR. DIAZ	X				X	5/3/01
COMR. McGAFFIGAN	X				X	5/1/01
COMR. MERRIFIELD	X					4/25/01

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and some provided additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on May 8, 2001.

NOTATION V O T E

RESPONSE SHEET

TO: Annette Vietti-Cook
Secretary of the Commission

FROM: CHAIRMAN MESERVE

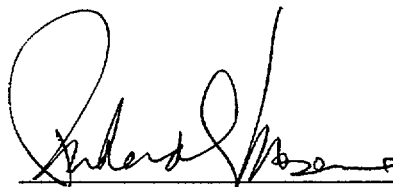
SUBJECT: SECY-01-0066 - PROPOSED RULE: MATERIAL CONTROL
AND ACCOUNTING AMENDMENTS

Approved X with edits Disapproved Abstain

Not Participating Request Discussion

COMMENTS:

I approve the staff's plan subject to the attached edits of the Federal Register notice.



SIGNATURE

5/01/01

DATE

Entered on "STARS" Yes X No

SUPPLEMENTARY INFORMATION:

Background

The Commission ^{proposed to amend} ~~has identified~~ an aspect of the MC&A requirements ^{so as to} ~~where it could~~ reduce unnecessary regulatory burden and ^{to} provide additional flexibility to a licensee required to submit Material Balance Reports and Inventory Composition Reports (also called Physical Inventory Listing report). The current regulations require these reports to be compiled as of March 31 and September 30 of each year and submitted within 30 days after the end of the period covered by the report. These twice yearly reports are typically based on book values as opposed to physical inventory results because the dates do not always coincide with the time frame for a facility's physical inventory. Physical inventories for Category III facilities are conducted on an annual basis, semi-annually for Category I facilities, and every two to six months for Category II facilities. The term Material Status Reports refers to both the Material Balance Reports and the Inventory Composition Reports and is used in Part 75. ✓

A Category I licensee is one that is licensed to possess and use formula quantities of strategic special nuclear material (SSNM) (e.g., 5 kilograms of uranium enriched to 20 percent or more in the uranium-235 isotope.) SSNM means uranium-235 (contained in uranium enriched to 20 percent or more in the uranium-235 isotope), uranium-233, or plutonium. There are currently two licensed Category I facilities. A Category II licensee is one that is licensed to possess and use greater than one effective kilogram of special nuclear material (SNM) of moderate strategic significance (e.g., uranium enriched to more than 10 percent but less than 20 percent in the uranium-235 isotope, with limited quantities at higher enrichments.) Currently, there is only one licensed Category II facility, General Atomics, and it has a possession-only

facilities were made more performance oriented and moved to Part 74 (50 FR 7575; February 25, 1985). The requirements for Category I facilities were similarly moved in 1987 (52 FR 10033; March 30, 1987). The MC&A requirements for Category II facilities and the general MC&A requirements are still interspersed among the safety and general licensing requirements of Part 70. The requirements regarding Category II material are also overly prescriptive.

In addition, Part 74 includes several typographical errors, old implementation dates, and some terminology that should be updated to reflect current practice and to be consistent with the regulatory guides.

Finally, the currently effective categorical exclusion for approval of safeguards plans does not clearly include the approval of an amendment to a safeguards plan.

Discussion

Material Status Reports.

A licensee authorized to possess SNM at any one time or location in a quantity totaling more than 350 grams of contained uranium-235, uranium-233, or plutonium, or any combination thereof, must complete and submit in a computer-readable format a Material Balance Report concerning SNM received, produced, possessed, transferred, consumed, disposed of, or lost. A Material Balance Report is a summary of nuclear material changes from one inventory period to the next. This report must be compiled as of March 31 and September 30 of each year and filed within 30 days after the end of the period. Under §§ 76.113, 76.115, and 76.117, the gaseous diffusion plants (certificate holders) are also required to submit the report twice yearly on the same schedule. (Note that the term "licensee" includes the gaseous diffusion plants as it is used within the statements of consideration, unless otherwise stated.) Each licensee is also required to file a statement of the composition of the ending inventory with

General Requirements.

The current general MC&A requirements in Part 70 require a licensee to keep records showing the receipt, inventory, disposal, and transfer of all SNM and specifies the retention period for those records. These recordkeeping requirements are not being changed. The general requirements currently in §§ 70.51(b)(1) through (b)(5) would be captured in new §§ 74.19 (a)(1) through (a)(4). The reporting requirements currently in § 70.52 requiring a licensee to report loss or theft of SNM remain unchanged and would be covered by § 74.11. The requirements for a Nuclear Material Transfer Report in § 70.54 would remain unchanged and be captured by § 74.15. The existing requirement in § 70.51(d) for all licensees authorized to possess more than 350 grams of contained SNM to conduct an annual physical inventory of all SNM would be retained and be moved to new § 74.19(c). The requirement currently in § 70.51(c) for all licensees authorized to possess SNM in a quantity exceeding one effective kilogram of SNM to establish, maintain, and follow written MC&A procedures that are sufficient to enable the licensee to account for the SNM, would be located in new § 74.19(b). The requirements in § 70.53 would be located in §§ 74.13 and 74.17.

Category II Requirements.

Current domestic MC&A regulations in Part 70 for licensees who possess greater than one effective kilogram of strategic special nuclear material in irradiated fuel reprocessing operations or moderate strategic special nuclear material have been interspersed among the safety and general licensing requirements in Part 70. These MC&A requirements are being moved to Part 74 to avoid confusion with the safety requirements in Part 70, to allow the

Send comments on any aspect of this proposed information collection, including suggestions for reducing this burden, to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet electronic mail at BJS1@NRC.GOV; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0004, -0009, -0058, -0123, and -0132), Office of Management and Budget, Washington, DC 20503.

Comments to OMB on the information collections or on the above issues should be submitted by (insert 30 days after publication in the Federal Register). Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given to comments received after this date.

Public Protection Notification

If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

Regulatory Analysis

Statement of the Problem and Objective:

✓ The Commission ^{proposes to amend} has identified an aspect of the MC&A requirements ^{that} ~~where it would be~~ ^{such} ~~desirable~~ to reduce the regulatory burden and provide additional flexibility to licensees required to submit Material Balance Reports and Inventory Composition Reports. The current regulations require a licensee authorized to possess at any one time or location SNM in a

modifications would enhance the regulatory process by providing any future Category II licensees a better understanding of the procedures and requirements for MC&A. The principal cost for this action would be the modest expenditure of NRC staff resources to issue this rulemaking. However, there are no currently active Category II licensees that would benefit from the revised regulations for Category II facilities. Another advantage is that domestic MC&A requirements would be consolidated and would provide a graded, risk-informed approach to MC&A regulation. In addition, the existing typographical errors, outdated terminology, and old implementation dates would be corrected.

Presentation of Results:

The recommended action is to adopt the first option because it would reduce the burden on licensees in preparing and filing their Material Balance Reports and Physical Inventory Listing Reports. The process would become more efficient, and the burden of producing the reports would be reduced by a total of approximately 1,217 staff-hours. In addition to reducing unnecessary regulatory burden on licensees, the changes would enhance the operational efficiency of the NMMSS contractor by spreading the report submittals more evenly throughout the year. This change would not preclude the gaseous diffusion plants with their large number of transactions from continuing to request monthly summaries from the NMMSS to reconcile ^{their} ~~its~~ records. The proposed rule would also consolidate the MC&A requirements in Part 74 and adopt more risk-informed regulations for Category II facilities. These modifications should enhance the regulatory process by providing any future Category II licensee a better understanding of the procedures and requirements for MC&A. The principal cost for this action would be the modest expenditure of NRC staff resources to issue this rulemaking. The total cost of this rulemaking to the NRC is estimated at 1.2 FTE. The total savings to the industry is

Comments of Commissioner Dicus Regarding SECY 01-0066

I approve staff's recommendation to consolidate and modify the Category II facility and the generally applicable material control and accounting requirements currently contained in 10 CFR Part 70 into 10 CFR Part 74, and to make the necessary conforming adjustments to other impacted regulations. I recommend that the following edits be incorporated into the Federal Register notice prior to its publication:

1. Page 11, item (1), 2nd sentence. Revise to read as follows: "From a safeguards risk and graded approach perspective, This would be consistent with the annual frequency for Category III facilities and semiannual frequency for Category I facilities."
2. Page 12, item (6), 2nd sentence. Revise to read as follows: "From a safeguards risk and graded approach perspective, This compares to the annual requirement for Category I and the every two year requirement for Category III."

gfd

4-30-01

NOTATION VOTERESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER DIAZ
SUBJECT: **SECY-01-0066 - PROPOSED RULE: MATERIAL CONTROL
AND ACCOUNTING AMENDMENTS**

Approved ^{with edits.} XX *h* Disapproved _____ Abstain _____
Not Participating _____

COMMENTS:Specific edits:

1. Page 20, Section 74.59: Insert the word "Safety" in the Office of Nuclear Material Safety and Safeguards.
2. Page 21, Section 150.20: The reference to "Part 74" should be replaced by "§§ 74.11, 74.15., and 74.18."
3. Page 49, Section 74.2: As structured, paragraph (a) could be incorrectly interpreted if the reader thinks the phrase "who possess special nuclear..." refers to the licensees in the previous phrase. To ensure correct interpretation of paragraph (a), the phrase "except licensees whose ..." should be made into a separate sentence.
4. Page 73, Section 150.20: In paragraph (b) the phrase "of Part 74 of this chapter" should be added after the reference to "§ 74.18."

General comment: The Federal Register Notice should be reviewed for additional editorial, typographical, etc. changes.



SIGNATURE

5.03.01

DATE

Entered on "STARS" Yes ☒ No _____

COPIES --

01 01 01 01

NOTATION VOTE

RESPONSE SHEET


TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MCGAFFIGAN
SUBJECT: **SECY-01-0066 - PROPOSED RULE: MATERIAL CONTROL
AND ACCOUNTING AMENDMENTS**

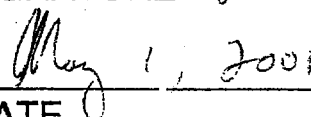
Approved x Disapproved Abstain

Not Participating

COMMENTS:

Approved with minor edits to the Federal Register notice.
as indicated on the attached.



SIGNATURE


DATE

Entered on "STARS" Yes x No

facilities were made more performance oriented and moved to Part 74 (50 FR 7575; February 25, 1985). The requirements for Category I facilities were similarly moved in 1987 (52 FR 10033; March 30, 1987). The MC&A requirements for Category II facilities and the general MC&A requirements are still interspersed among the safety and general licensing requirements of Part 70. The requirements regarding Category II material are also overly prescriptive.

In addition, Part 74 includes several typographical errors, old implementation dates, and some terminology that should be updated to reflect current practice and to be consistent with the regulatory guides.

Finally, the currently effective categorical exclusion for approval of safeguards plans does not clearly include the approval of an amendment to a safeguards plan.

Discussion

Material Status Reports.

A licensee authorized to possess SNM at any one time or location in a quantity totaling more than 350 grams of contained uranium-235, uranium-233, or plutonium, or any combination thereof, must complete and submit in a computer-readable format a Material Balance Report concerning SNM received, produced, possessed, transferred, consumed, disposed of, or lost. A Material Balance Report is a summary of nuclear material changes from one inventory period to the next. This report must be compiled as of March 31 and September 30 of each year and filed within 30 days after the end of the period. Under §§ 76.113, 76.115, and 76.117, the gaseous diffusion plants (certificate holders) are also required to submit the report twice yearly on the same schedule. Note that the term "licensee" includes the gaseous diffusion plants, as it is used within the statements of consideration, unless otherwise stated. Each licensee is also required to file a statement of the composition of the ending inventory with

the Material Balance Report. An Inventory Composition Report is a report of the actual inventory listed by specified forms of material (e.g., irradiated versus unirradiated fuel at power reactors.) However, a licensee required to submit a Material Status Report under § 75.35 is directed to submit this report only in accordance with the provisions of that section (i.e., at the time of a physical inventory). Section 75.35 applies only to those facilities that have been selected to report under the Agreement Between the United States and the International Atomic Energy Agency (IAEA) for the Application of Safeguards in the United States. For those facilities reporting under Part 75, the frequency of reporting is dependent on the frequency of the physical inventory, which is dependent on the Category of facility (i.e., Category I, II or III). The report would be required either once (Category III) or twice (Category I and II) per year.

The principal purpose of the Material Status Report is the periodic reconciliation of licensee records with the records in the Nuclear Materials Management and Safeguards System (NMMSS). The NMMSS is the national database for tracking source and SNM. The data from the NMMSS is then used to satisfy the requirement of the US/IAEA Safeguards Agreement to provide the annual Material Balance Report for facilities selected under the Agreement or associated Protocol.

The proposed rule would modify the regulations to require the Material Balance Report and the Physical Inventory Listing Report at the time of a physical inventory as is currently stated in § 75.35. The proposed rule would require the reports to be completed within 60 days of the beginning of the physical inventory for independent spent fuel storage installations, reactors, and Category II and III facilities, and within 45 days of the beginning of the physical inventory for Category I facilities. This modification would not affect licensees reporting under Part 75. Because most facilities are only required to conduct a physical inventory once a year, the reporting frequency would be reduced from twice a year to once a year. For most licensees, reconciliation once a year instead of twice a year would not appear to be a problem

because the number of transactions is such that reconciliation would be manageable. For the gaseous diffusion plants that have a significantly larger number of transactions, reconciliation could be more difficult if performed once a year. However, the gaseous diffusion plants, by practice, currently reconcile their records with the NMMSS on a bimonthly basis and could continue this practice.

As indicated, a licensee is required to submit the semiannual Material Balance Report and Inventory Composition Report within 30 days of March 31 and September 30 of each year. The pre-established timing of the submittal has two drawbacks. Specifically, the reports rarely coincide with a physical inventory and all of the reports for a given period are provided to the NMMSS at the same time. The data from a physical inventory is significantly more meaningful than the book values reported during the interim periods. Staggering the submittals would benefit the NMMSS contractor because not all licensees conduct inventories at the same time. Requirements for the NMMSS contractor would likely be spread more evenly throughout the year. Modifying the requirement to stipulate that the Material Balance Report and the Inventory Composition Report shall be submitted at the time of the physical inventory could alleviate these problems and provide more meaningful data.

Another consideration is whether there would be an adverse impact on meeting IAEA safeguards requirements. Only one Material Status Report is required per year, pursuant to the terms of the US/IAEA Safeguards Agreement and § 75.35. Consequently, there would be no adverse impact on meeting IAEA safeguards requirements.

The proposed rule would revise the timing to complete the Material Balance Report and Physical Inventory Listing Report to coincide with a facility's physical inventory. The proposed rule would also provide additional time to complete the paperwork, except for those licensees reporting under Part 75. These changes would provide most licensees with additional flexibility and reduce the regulatory burden. The proposed rule would use Physical Inventory Listing

Report instead of Inventory Composition Reports to be consistent with the name of the actual form (DOE/NRC Form 742C).

Categorical Exclusion.

X The categorical exclusion (§ 51.22(c)(12)) covers the issuance of an amendment to a license pursuant to 10 CFR Parts 50, 60, 61, 70, 72, or 75, relating to safeguards matters or approval of a safeguards plan. It does not address amendments to those plans. As written, the categorical exclusion could be used for approval of a safeguards plan. However, an ^{environmental assessment} EA would be necessary for approval of an amendment to the safeguards plan. Initial approval is covered by the categorical exclusion, but amendments do not appear to be covered. This inconsistency appears to be inadvertent. Adding language covering revisions to safeguards plans would rectify this omission. In addition, the categorical exclusion currently lists several parts. Providing a generic reference to any part of 10 CFR Chapter I would correct the current listing and avoid the need for changes due to new parts being added.

General and Category II MC&A Requirements.

In 1982, the NRC began an effort to move the MC&A requirements from Part 70 to Part 74 and make the requirements more performance-oriented. Subsequent rulemakings in February 25, 1985 (50 FR 7575) and March 30, 1987 (52 FR 10033), moved the requirements for Category I and III facilities. The MC&A requirements for Category II facilities and the general MC&A requirements are currently interspersed among the safety and general licensing requirements of Part 70. The requirements regarding Category II material are also overly prescriptive as they contain some requirements that are more stringent than the requirements

for Category I facilities. The proposed rule represents the final stage and would result in the movement of the remaining general MC&A requirements and the requirements for Category II facilities from Part 70 to Part 74. The proposed rule would also make the MC&A requirements for the Category II facilities more risk-informed. The proposed risk-informed approach for the Category II facilities is consistent with the current MC&A regulations that apply to Category I and III facilities. In addition, the proposed rule would make needed modifications that were missed in earlier updates of the MC&A regulations, correct typographical errors, delete old implementation dates, clarify some definitions, and include several new definitions.

Specifically, the proposed rule would clarify the definitions for "Category IA material" and "inventory differences" and make them consistent with the current regulatory guides. The terms "beginning inventory," "plant," "removals from inventory," and "removals from process," would be newly defined. The definition for "removals" would be deleted. There has been some confusion by licensees over the term "removals." The term "removals" would be replaced by the terms "removals from process" and "removals from inventory." The definitions being proposed are consistent with the current regulatory guides. In addition, both the terms "beginning inventory" and "plant" are used in the current rule language, but were never defined in the rule. The definitions being proposed are consistent with the definitions contained in the current regulatory guides. The changes to the Category II requirements are discussed below.

General Requirements.

X The current general MC&A requirements in Part 70 require a licensee to keep records showing the receipt, inventory, disposal, and transfer of all SNM and specifies the retention period for those records. These recordkeeping requirements are not being changed. The general requirements currently in §§ 70.51(b)(1) through (b)(5) would be captured in new §§ 74.19 (a)(1) through (a)(4). The reporting requirements currently in § 70.52 requiring a licensee to report loss or theft of SNM remain unchanged and would be covered by § 74.11. The requirements for a Nuclear Material Transfer Report in § 70.54 would remain unchanged and be captured by § 74.15. The existing requirement in § 70.51(d) for all licensees authorized to possess more than 350 grams of contained SNM to conduct an annual physical inventory of all SNM would be retained and be moved to new § 74.19(c). The requirement currently in § 70.51(c) for all licensees authorized to possess SNM in a quantity exceeding one effective kilogram of SNM to establish, maintain, and follow written MC&A procedures that are sufficient to enable the licensee to account for the SNM, would be located in new § 74.19(b). The requirements in § 70.53 would be located in §§ 74.13 and 74.17.

Category II Requirements.

Current domestic MC&A regulations in Part 70 for licensees who possess greater than one effective kilogram of strategic special nuclear material in irradiated fuel reprocessing operations or moderate strategic special nuclear material have been interspersed among the safety and general licensing requirements in Part 70. These MC&A requirements are being moved to Part 74 to avoid confusion with the safety requirements in Part 70, to allow the

pursuant to §§ 74.31(b), 74.33(b), 74.45(c), or 74.59(e) of this chapter, as appropriate; and

(iii) Other material control procedures as the Commission determines to be essential for the safeguarding of uranium source material at an uranium enrichment facility or of special nuclear material and providing that the licensee shall make no change that would decrease the effectiveness of the material control and accounting program implemented pursuant to §§ 70.22(b), 74.31(b), 74.33(b), 74.41(b), or 74.51(c) of this chapter and the measurement control program implemented pursuant to §§ 74.31(b), 74.33(b), 74.41(b), or 74.59(e) of this chapter without the prior approval of the Commission. A licensee desiring to make changes that would decrease the effectiveness of its material control and accounting program or its measurement control program shall submit an application for amendment to its license pursuant to § 70.34.

* * * * *

12. In § 70.51, the section heading is revised; paragraphs (a), (b), (b)(1) through (b)(5), (c), (d), (e), (f), (g), and (h) are removed; and paragraphs (b)(6), (b)(7), i(1), and i(2) are redesignated as paragraphs (a), (b), c(1), and c(2) respectively, and revised to read as follows:

§ 70.51 Records requirements.

(a) Before ~~to~~ license termination, licensees shall forward the following records to the appropriate NRC Regional Office: X

(1) Records of disposal of licensed material made under §§ 20.2002 (including burials authorized before January 28, 1981¹), 20.2003, 20.2004, 20.2005;

¹A previous § 20.304 permitted burial of small quantities of licensed materials in soil before January 28, 1981, without specific Commission authorization. See § 20.304 contained in the 10 CFR, parts 0 to 199, edition revised as of January 1, 1981.

(2) Records required by § 20.2103(b)(4); and

(3) Records required by § 70.25(g).

(b) If licensed activities are transferred or assigned in accordance with § 70.32(a)(3), the licensee shall transfer the following records to the new licensee and the new licensee will be responsible for maintaining these records until the license is terminated:

(1) Records of disposal of licensed material made under §§ 20.2002 (including burials authorized before January 28, 1981¹), 20.2003, 20.2004, 20.2005;

(2) Records required by § 20.2103(b)(4); and

(3) Records required by § 70.25(g).

(c)(1) Records which must be maintained pursuant to this part may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by Commission regulations. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

(2) If there is a conflict between the Commission's regulations in this part, license condition, or other written Commission approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the Commission, pursuant to §70.14, has granted a specific exemption from the record retention requirements specified in the regulations in this part.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MERRIFIELD
SUBJECT: **SECY-01-0066 - PROPOSED RULE: MATERIAL CONTROL
AND ACCOUNTING AMENDMENTS**

Approved ☒ Disapproved ☐ Abstain ☐

Not Participating ☐

COMMENTS:

No additional comments.


SIGNATURE

4/25/01
DATE

Entered on "STARS" Yes ☒ No ☐