



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

December 3, 2002

OFFICE OF THE
SECRETARY

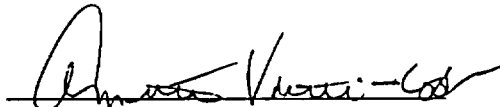
COMMISSION VOTING RECORD

DECISION ITEM: SECY-02-0179

TITLE: FINAL RULE: MATERIAL CONTROL AND
ACCOUNTING AMENDMENTS

The Commission (with all Commissioners agreeing) approved the final rule as noted in an Affirmation Session on November 21, 2002 and recorded in the Staff Requirements Memorandum (SRM) of December 3, 2002.

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-02-0179

RECORDED VOTES

	APPRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. MESERVE	X				X	11/4/02
COMR. DICUS	X				X	10/12/02
COMR. DIAZ	X				X	10/10/02
COMR. McGAFFIGAN	X				X	10/17/02
COMR. MERRIFIELD	X					10/16/02

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the final rule and some provided additional comments. Subsequently, the Commission approved the final rule in an affirmation session on November 21, 2002, as reflected in the SRM issued on December 3, 2002.

AFFIRMATION V O T E

RESPONSE SHEET

TO: Annette Vietti-Cook
Secretary of the Commission

FROM: CHAIRMAN MESERVE

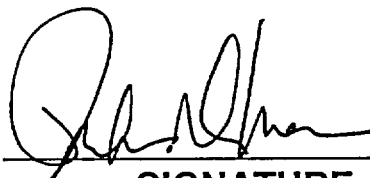
SUBJECT: SECY-02-0179 - FINAL RULE: MATERIAL CONTROL
AND ACCOUNTING AMENDMENTS

Approved X with comments Disapproved Abstain

Not Participating

COMMENTS:

See attached.



SIGNATURE

November 9, 2012

DATE

Entered on "STARS" Yes ✓ No

COMMENTS OF CHAIRMAN MESERVE ON SECY-02-0179

SECY-02-0179 requests Commission approval for publication of the final rule: "Material Control and Accounting Amendments." The rulemaking would clarify the material control and accounting requirements by removing the inconsistencies between Category I, II, & III requirements.

I join my fellow Commissioners in approving publication of the final rule. I also certify that this rule satisfies the requirement of the Regulatory Flexibility Act, 5 U.S.C. 605 (b). However, I note that the Environmental Assessment for the final rule includes a section on environmental justice. Attachment 3 at 2. The staff had proposed that environmental justice issues should not be considered if a Finding of No Significant Impact has been made. COMSECY-99-021, at 3. The Commission approved the staff's recommendation. Staff Requirements Memorandum for COMSECY-99-021, Aug. 5, 1999. In future rulemakings, staff should adhere to this direction.

I suggest some editorial changes of the *Federal Register* notice (attached).

programs. The NRC staff has concluded that this rulemaking should go forward. This rulemaking clarifies the MC&A requirements by removing the inconsistencies between Category I, II, and III requirements. This should improve the NRC staff's ability to focus on the more risk significant aspects of the requirements. The rulemaking also results in a single location for all the MC&A requirements which will help both the NRC and stakeholders to locate those requirements that apply to a given facility.

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. Currently, 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", as it is used within this statement of considerations, includes the gaseous diffusion plants 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 database is maintained ~~by a contractor~~ under a Department of Energy contract. The data from the NMMSS are 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 have modified 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 for all licensees. The proposed rule would have required the reports to be completed within 60 days of the beginning of the physical inventory for independent spent fuel storage installations, reactors, and Category I, II, and III facilities. The modifications in the final rule do 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 does not appear to be a problem because the number of transactions is such that reconciliation is 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 can continue this practice under the revised regulation.

Based on public comments, the final rule has been modified from the proposed rule. The reporting requirements for Category I facilities will remain unchanged from the current requirements. Category I licensees will still be required to compile the reports as of March 31 and September 30 of each year and submit the Material Balance Reports and the Physical Inventory Listing Reports within 30 days after the end of the period covered by the report. The requirements for all other facilities will be revised as outlined in the proposed rule.

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 preestablished 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 ^{are} ~~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 be submitted at the time of the physical inventory could alleviate these problems, provide more meaningful data, and be more efficient and effective. ✓ ✓

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

The final rule revises the timing to complete the Material Balance Report and Physical Inventory Listing Report to coincide with a facility's physical inventory, except for Category I licensees. The final rule also provides additional time to complete the paperwork, except for Category I licensees and those licensees reporting under Part 75. Identification of an actual

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 requirements to be presented in a more orderly manner, and to make them more risk-informed. Emphasis has been given to performance requirements rather than prescriptive requirements to allow licensees to select the most cost-effective way to satisfy NRC requirements.

The basic MC&A requirements for Category II facilities are being retained in Part 74 but are presented in a more organized manner. The performance objectives for Category II facilities are: (1) confirmation of the presence and location of SNM; (2) prompt investigation and resolution of any anomalies indicating a possible loss of SNM; (3) rapid determination of whether an actual loss of a significant quantity of SNM has occurred; and (4) timely generation of information to aid in the investigation and recovery of missing SNM in the event of an actual loss. Implementation of these objectives is commensurate with the amount and type of material. The principal differences between the MC&A requirements in this final rule and those in the previous regulations are:

(1) The revised regulations reduce the required frequencies of Category II physical inventories from the current frequency of ^{every} 2 months for SSNM and ^{every} 6 months for everything else ^{every} to 9 months. From a safeguards risk and graded approach perspective, this is consistent with the annual frequency for Category III facilities and semiannual frequency for Category I facilities;

(2) The concept of Inventory Difference (ID) and Standard Error of the Inventory

A. General comments on the proposed rule.

1. Support of the proposed rule.

Comment: Two of the commenters provided specific comments in support of the proposed rule. NEI indicated that the decreased frequency of SNM inventory reporting for Category II and III facilities will reduce the regulatory burden on licensees and that the partial harmonization of the inventory reporting requirements of 10 CFR parts 74 and 75 was commendable. Overall NEI indicated support of the proposed amendments and believe^s that they will reduce resource demands placed on both the NRC and individual licensees. The consulting firm indicated that without the proposed changes, the MC&A requirements for SNM in amounts of moderate strategic significance (Category II) would remain prescriptive and irrationally more restrictive than those for formula quantities of strategic significance (Category I).

Response: The NRC is not making any changesⁱⁿ to the final rule that the NRC believes would negate the industry's general support for this rulemaking.

2. Elimination of MC&A regulations for irradiated fuel reprocessing plants.

Comment: One commenter expressed concern that the MC&A requirements for irradiated fuel reprocessing plants that are located in 10 CFR 70.51(e) were eliminated. The commenter noted that if this was the intent then it should have been highlighted in the Statement of Considerations. The commenter believes that it was prudent to keep in place these key regulations, which may not be easily replaced if a need were to arise. The commenter offered specific suggestions to move the reprocessing requirements to § 74.41, clarify the performance objectives, and rename Subpart D to include SNM in Irradiated Fuel Reprocessing Operations.

burden to both licensees and the NRC. The commenter stated that it would not be risk-informed nor performance-based. The commenter stated that the Operations Center would not have on duty, staff with the performance capability necessary to take meaningful action, except to notify NMSS licensing staff. These notifications should continue to be reported directly to NRC licensing staff who already would be aware of the initiation of the licensee's investigative procedures and following progress with the assistance of NRC inspectors for appropriate response. The rule should name the Director of NMSS, but in practice, the specific NMSS licensing unit - with regular and emergency telephone numbers- could be listed as the contact and updated in each licensee's NRC-approved fundamental nuclear material control plan. The commenter stated that this graded, working-level approach has proven suitable over 30 years without overaction or a compelling need for change.

Response: The NRC agrees to reinsert the notification exception for weekends and holidays in § 74.57(c). Both Category I facilities impacted by the change objected and requested the exception be retained. A short delay in notification on weekends and holidays is acceptable. Any discovery of an actual loss or theft of SNM requires the licensee to report within 1 hour of discovery under § 74.11. The final rule reflects the retention of the exception for weekends and holidays. Notification would occur on the next scheduled workday.

The NRC does not agree with the commenters' request to change the notification from the NRC Operations Center to either the licensing unit or the Resident Inspector. NRC staff members are not always available to take calls from licensees due to leave, training, travel, etc. The call could easily be routed to voice mail or to an individual not familiar with the facility. While the licensee may have technically notified the NRC by leaving a voice mail message for a staff member, the NRC may not have actual knowledge until the staff person returns to the office. Notification to the Operations Center provides a record of the call and ensures that the appropriate NRC staff will be notified so that the necessary follow-up actions can occur. The

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 will reduce the burden on licensees in preparing and filing their Material Balance Reports and Physical Inventory Listing Reports. The process will become more efficient, and the industry burden of producing the reports will be reduced by ~~a total of~~ approximately 1,217 staff-hours. In addition to reducing unnecessary regulatory burden on licensees, the changes will enhance the operational efficiency of the NMMSS contractor by spreading the report submittals evenly throughout the year. This change will not preclude the gaseous diffusion plants with their large number of transactions from continuing to request monthly summaries from the NMMSS to reconcile their records. The final rule will 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 about 1,217 hours per year. The action is considered to be cost beneficial to licensees and will improve the operational efficiency of the NMMSS contractor. Adequate safeguards would be maintained. Consequently, the Commission believes public confidence would not be adversely affected by this rulemaking.

Decision Rationale:

Based on the discussion of the benefits and impacts of the alternatives, the NRC

ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO SIGNIFICANT IMPACT
FOR THE
FINAL RULE
AMENDING 10 CFR PARTS 51, 61, 70, 72, 73, 74, 75, 76, and 150
Material Control and Accounting Amendments

Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
~~March 2002~~

I. THE PROPOSED ACTION

The proposed action is to amend the material control and accounting (MC&A) regulations. The MC&A requirements for facilities possessing special nuclear material (SNM) of moderate strategic significance (also called Category II facilities) are being revised to be risk informed.

II. THE NEED FOR THE PROPOSED ACTION

In 1982, NRC staff initiated an effort to move the MC&A requirements from Part 70 to Part 74 and to make the requirements more risk informed and performance oriented. In 1985, the MC&A requirements for Category III facilities were made more performance oriented and moved to Part 74. The requirements for Category I facilities were made more performance oriented and moved in 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. In addition, the requirements for Category II facilities still contain some overly prescriptive requirements. The rule represents the final stage and would result in the movement of the remaining general and Category II MC&A requirements and in making the Category II requirements risk informed.

III. ENVIRONMENTAL IMPACTS OF PROPOSED ACTION

The amendments to make the MC&A requirements for Category II facilities more risk informed should not have any measurable or identifiable impact on the environment. The basic requirements remain unchanged. The rule will not result in changes in a licensee's processes or manufacturing procedures and, therefore, will not affect or alter any release of effluents to the environment. There could be some occupational radiation exposure resulting from safeguards related activities such as data recording, inspection support, sample taking, and laboratory support. All of these activities are normal and are currently required and are expected to be a tiny fraction of those required for overall plant operations. The safeguards activities that take place are procedural in nature and are a minor fraction of overall plant operation. The amendments will not involve any significant environmental impact.

IV. ENVIRONMENTAL JUSTICE

The NRC has committed to complying with Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994, in all its actions. The NRC uses the following working definition of "environmental justice": the fair treatment and meaningful involvement of all people, regardless of race, ethnicity, culture, income, or educational level with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. No significant environmental impacts have been identified, and the NRC has determined that there are no disproportionate, high, and adverse impacts on minority and low-income populations. Consequently, further evaluation of environmental justice concerns, as outlined in Executive Order 12898, is not warranted.

AFFIRMATION VOTERESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER DICUS
SUBJECT: **SECY-02-0179 - FINAL RULE: MATERIAL CONTROL AND ACCOUNTING AMENDMENTS**

Approved x Disapproved Abstain

Not Participating

COMMENTS:

See attached comments.

Greta Joy Dicus
SIGNATURE
October 12, 2002
DATE

Entered on "STARS" Yes x No

Comments of Commissioner Dicus Regarding SECY 02-0179

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 also agree with staff that due to the nature and scope of these changes, it is logical to move forward with the final rule prior to staff completing their comprehensive review and evaluation of the safeguards and security program.

gpc
10-12-02

AFFIRMATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

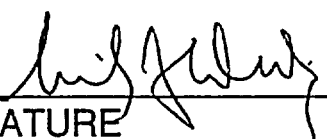
FROM: COMMISSIONER DIAZ

SUBJECT: **SECY-02-0179 - FINAL RULE: MATERIAL CONTROL AND
ACCOUNTING AMENDMENTS**

Approved ^{w/edits} XX  Disapproved _____ Abstain _____

Not Participating _____

COMMENTS:



SIGNATURE

Oct 10, 02

DATE

Entered on "STARS" Yes X No _____

Difference (SEID) is used to replace the Material Unaccounted For (MUF) concept in the statistical program. This is consistent with the statistical terms and methods used in Part 74 for Category I and III facilities and with NRC guidance and reference documents;

(3) The significance testing of ID with a three SEID limit is less restrictive than the test level of two SEID specified in previous § 70.51(e)(5). This is consistent with Category I facilities that use a three-SEID limit with a constraint on SEID of 0.10 percent of active inventory. The measurement quality constraint for Category II remains at 0.125 percent of active inventory for SEID. This change results in a reduction of unwarranted, disruptive, and costly investigations, reports, or responses to ID threshold actions;

(4) An item control program for Category II facilities that is consistent with Category III facilities is added. Category II item control requirements are less costly than the more stringent Category I item monitoring. The item control requirements mainly consist of providing current knowledge of location, identity, and quantity of plant-wide items existing for at least 14 days. The performance-based program allows a licensee to propose its item control method and frequency;

(5) The combined standard error concept and a de minimus quantity for plutonium and uranium in the evaluation of shipper-receiver differences is used. This is consistent with the requirements for Category I and III facilities in Part 74; and

(6) The required frequency for the independent review and assessment of the facility's MC&A program is changed from annual to a minimum of 18 months. From a safeguards risk and graded approach perspective, this compares to the annual requirement for Category I and the every 2-year requirement for Category III.

is a significant step towards
The consolidation of regulations ~~completes~~ NRC's regulatory reform goal of providing a graded approach to MC&A regulation. It also reduces the regulatory burden by making it easier for a licensee to find the MC&A requirements that apply to its facility.

§ 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. General reporting requirements as well as specific requirements for certain licensees possessing special nuclear material of low strategic significance, special nuclear material of moderate strategic significance, and formula quantities of strategic special nuclear material are included. Requirements for the control and accounting of source material at enrichment facilities are also included.

* * * * *

24. Section 74.2 is revised to read as follows:

§ 74.2 Scope.

(a) The general reporting and recordkeeping requirements of subpart B of this part apply to each person licensed pursuant to this chapter who possess special nuclear material in a quantity greater than 350 grams of contained uranium-235, uranium-233, or plutonium, or any combination thereof; or who transfers or receives a quantity of special nuclear material of 1 gram or more of contained uranium-235, uranium-233, or plutonium. The general reporting and recordkeeping requirements of subpart B of this part do not apply to licensees whose MC&A reporting and recordkeeping requirements are covered by §§ 72.72, 72.76, and 72.78 of this chapter.

(b) In addition, specific control and accounting requirements are included in subparts C, D, and E for certain licensees who:

- Possess*
(1) Possess and use formula quantities of strategic special nuclear material;

in paragraph (a)(~~X~~) of this section).

X

29. Section 74.17 is revised to read as follows:

§ 74.17 Special nuclear material physical inventory summary report.

(a) Each licensee subject to the requirements of §§ 74.31 or 74.33 of this part shall submit a completed Special Nuclear Material Physical Inventory Summary Report on NRC Form 327 not later than 60 calendar days from the start of each physical inventory required by §§ 74.31(c)(5) or 74.33(c)(4). The licensee shall report the physical inventory results by plant and total facility to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

(b) Each licensee subject to the requirements of § 74.41(a) of this part shall submit a completed Special Nuclear Material Physical Inventory Summary Report on NRC Form 327 not later than 60 calendar days from the start of each physical inventory required by § 74.43(c)(7). The licensee shall report the physical inventory results by plant and total facility to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

(c) Each licensee subject to the requirements of § 74.51 shall submit a completed Special Nuclear Material Physical Inventory Summary Report on NRC Form 327 not later than 45 calendar days from the start of each physical inventory required by § 74.59(f). The licensee shall report the physical inventory results by plant and total facility to the Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

30. A new § 74.19 is added to read as follows:

AFFIRMATION VOTE

RESPONSE SHEET

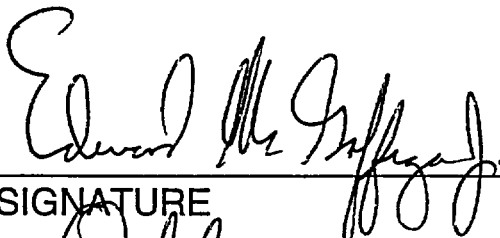
TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MCGAFFIGAN
SUBJECT: **SECY-02-0179 - FINAL RULE: MATERIAL CONTROL AND
ACCOUNTING AMENDMENTS**

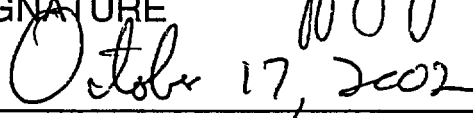
Approved ^{w/comment & edit} X Disapproved _____ Abstain _____

Not Participating _____

COMMENTS:

I approve with minor edit, and concur with Commissioner Diaz' edits.



SIGNATURE


DATE

Entered on "STARS" Yes X No _____

concludes that the requirements of the final rule are commensurate with the NRC's responsibilities for public health and safety and the common defense and security. This rulemaking will save both NRC staff and licensee resources. No other available alternative is believed to be as satisfactory. Thus, this action is recommended.

Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980, (5 U.S.C. 605(b)), the Commission certifies that this rule does not have a significant economic impact on a substantial number of small entities. The majority of companies that own these plants do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act or the size standards adopted by the NRC (10 CFR 2.810).

Backfit Analysis

X The NRC has determined that the backfit rule (§§ 50.109, ^{70.76,} 72.62, or 76.76) does not apply to this final rule because these amendments do not involve any provisions that would impose backfits as defined in the backfit rule. Therefore, a backfit analysis is not required.

Small Business Regulatory Enforcement Fairness Act

In accordance with the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

AFFIRMATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER MERRIFIELD
SUBJECT: **SECY-02-0179 - FINAL RULE: MATERIAL CONTROL AND ACCOUNTING AMENDMENTS**

Approved / Disapproved _____ Abstain _____

Not Participating _____

COMMENTS:

No additional comments.



SIGNATURE

10/16/02

DATE

Entered on "STARS" Yes _____ No _____