



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

February 5, 2009

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-08-0059

TITLE: RULEMAKING PLAN: PART 74 - MATERIAL CONTROL AND
ACCOUNTING OF SPECIAL NUCLEAR MATERIAL

The Commission (with all Commissioners approving in part and disapproving in part) acted on the subject paper as recorded in the Staff Requirements Memorandum (SRM) of February 5, 2009.

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

A handwritten signature in black ink, appearing to read "Annette L. Vietti-Cook", written over a horizontal line.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:

1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Klein
Commissioner Jaczko
Commissioner Lyons
Commissioner Svinicki
OGC
EDO

VOTING SUMMARY - SECY-08-0059

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	X	X			X	11/7/08
COMR. JACZKO	X	X			X	1/12/09
COMR. LYONS	X	X			X	11/3/08
COMR. SVINICKI	X	X			X	1/21/09

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved in part and disapproved in part the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on February 5, 2009.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: CHAIRMAN KLEIN
SUBJECT: SECY-08-0059 – RULEMAKING PLAN: PART 74 –
MATERIAL CONTROL AND ACCOUNTING OF
SPECIAL NUCLEAR MATERIAL

Approved X in part Disapproved X in part Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached X None ___



SIGNATURE

11/7/2008

DATE

Entered on "STARS" Yes No ___

**Chairman Klein's Comments on SECY-08-0059, Rulemaking Plan:
Part 74 -- Proposed Changes to the Material Control and Accounting of
Special Nuclear Material**

I approve in part, and disapprove in part, the staff's proposed changes to the NRC material control and accounting (MC&A) program. I disapprove the staff's recommended option 1, which would create a new NRC special nuclear material (SNM) categorization table, add the requirement that licensees conduct a diversion path analysis (DPA), and revise and consolidate current MC&A requirements in 10 CFR Part 74. Instead, I approve option 4, in which the staff would undertake a rulemaking limited to revising and consolidating current MC&A regulations in 10 CFR Part 74.

In the wake of the terrorist attacks of September 11, 2001, the NRC conducted a comprehensive review of its safeguards and security programs. As a result of this review, the NRC issued orders to its licensees for new physical protection measures, but did not issue MC&A orders because the MC&A posture of NRC licensees was, and remains, adequately protective of public health and safety and common defense and security. In addition, SECY-08-0059 does not make a case that systemic deficiencies exist in the current regulatory framework for MC&A. It is, therefore, doubtful that imposing a new SNM categorization table and a requirement to perform DPAs on current licensees would pass muster with the backfit requirements in 10 CFR Parts 50, 70, 72, and 76. Furthermore, I am concerned that the proposed graded safeguards approach is based on a similar approach that exists in draft form at the US Department of Energy (DOE). In view of the tentative nature of the DOE effort, it would be prudent to wait until DOE's product is finalized and demonstrated to be practical and effective before using it as the model for revising NRC MC&A regulations. In summary, I believe it would not be a wise expenditure of licensee and NRC resources to pursue these requirements at this time.

The staff proposes to expand MC&A requirements to americium and neptunium. The only licensees that could potentially be affected by this requirement would be NRC and Agreement State byproduct material licensees. I believe that the additional controls that have already been imposed on these licensees, in conjunction with the interim database and the pending National Source Tracking System, are sufficient to meet the intent of MC&A programs.

Looking to the future, it may be necessary to include americium and neptunium in the MC&A programs for potential future spent fuel reprocessing facilities. As noted in SECY-08-0134, "Regulatory Structure for Spent Fuel Reprocessing," Parts 73 and 74 will need to be revised to include appropriate requirements for reprocessing facilities. The staff should integrate the MC&A proposals presented in SECY-08-0059 into the effort to develop the regulatory framework for reprocessing facilities. In doing so, the staff may consider incorporating a new SNM table and a DPA requirement, in addition to including americium and neptunium in the MC&A programs for these facilities.



Dale E. Klein 11/7/2008

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER JACZKO
SUBJECT: SECY-08-0059 – RULEMAKING PLAN:
PART 74 – MATERIAL CONTROL AND
ACCOUNTING OF SPECIAL NUCLEAR
MATERIAL

Approved X Disapproved X Abstain _____

Not Participating _____

COMMENTS: Below _____ Attached X None _____



SIGNATURE
1/12/07

DATE

Entered on "STARS" Yes X No _____

Commissioner Jaczko's Comments on SECY-08-0059
Rulemaking Plan: Part 74 – Material Control and Accounting of Special Nuclear Material

I approve in part and disapprove in part the staff's recommendation to develop a proposed rule to further risk-inform the agency's material control and accounting (MC&A) regulations based upon Option 1 of this paper. The staff provided the Commission with six options for enhancing the current MC&A requirements. Option 1 would improve the agency's MC&A requirements by (i) revising the special nuclear material (SNM) categorization values; (ii) strengthening the ability to detect insider threats through the analysis of potential diversion paths; and (iii) consolidation of all MC&A regulatory requirements in 10 *Code of Federal Regulations* Part 74.

In the past few years the staff has stayed in close communication with the Department of Energy (DOE) as they revised their safeguards approach for special nuclear material (SNM). The staff and representatives from the DOE have also briefed the Commission on its graded safeguards approach and on the Government Accountability Office's classified audit concerning the differences in protection strategies between the DOE and the Nuclear Regulatory Commission (NRC) for SNM.

As a result of the many studies conducted by the DOE, the department will be expanding its categorization beyond SNM to include americium (Am) and neptunium (Np) because these materials can be used in a nuclear explosive device. I understand that the DOE has determined, for its operational purposes, that they will need to protect significant quantities of Am and Np and that they will be reporting the material balances to the Nuclear Materials Management and Safeguards System (NMMSS). Based upon this paper, the staff is recommending that NRC and Agreement State materials licensees who possess Am and Np be required to have an MC&A program and report its material holdings, transfers and receipts to the NMMSS.

From reading the supplementary memorandum provided by NRC staff supporting the need for enhanced categorization, staff believes that licensees' "material holdings of americium and neptunium are generally below thresholds requiring significantly increased measures." Thus, it is unclear to me why the agency would need to require a separate MC&A program and NMMSS reporting for Am when the material is currently protected under Increased Controls and will be accounted for in the National Source Tracking System (NSTS). I believe the NSTS provides a framework to account for byproduct material which includes Am possessed by these licensees. Currently, the NSTS does not account for neptunium; however, I believe the agency could require those licensees who possess Np to account for it within the NSTS.

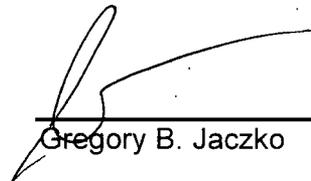
I disapprove of expanding the MC&A requirements to NRC and Agreement State licensees that possess Am and Np because I am not convinced that the Commission should do so at this time. I believe this current effort should focus on facilities and operations where more robust safeguards and security programs may be required to preclude the diversion or theft of material that could be used in an improvised nuclear device (IND). Therefore, the staff should provide the Commission with a paper, including its recommendation, describing the pros and cons of using the NSTS or an MC&A program with NMMSS reporting as an organizing framework for accounting for Np and Am by this group of licensees.

I agree with the staff's assessment that better categorization of SNM is needed to incorporate "their unique physical and chemical forms and special safeguards attributes" into the NRC's

MC&A regulations. I do not believe, however, that the agency should adopt the DOE's categorization table. Instead the staff should adapt the DOE's framework for categorization in a manner that specifically addresses the unique needs of the regulated community both current and future (e.g., MOX plant and reprocessing facilities). Thus, I approve of the development of a categorization table as an organizing framework to better align MC&A and physical protection requirements.

I approve of the staff's development of a more robust process for identifying system vulnerabilities to insider threats. The inclusion of additional rigor into evaluating the potential threats posed by insiders that could divert material to fashion an IND should lead to better protection of nuclear materials. I believe that the additional analysis that is conducted should not be arbitrarily limited, but should be applied in a risk-informed manner across the range of materials and facilities consist with the newly developed categorization table.

Lastly, I support the staff's efforts to further consolidate the MC&A requirements into 10 CFR Part 74. The proposed rule provided to the Commission should include both the aforementioned changes and the newly consolidated sections from the relevant parts of the agency's regulations.



Gregory B. Jaczko 1/1/09
Date

NOTATION VOTE

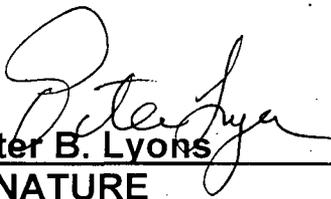
RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER LYONS
SUBJECT: SECY-08-0059 – RULEMAKING PLAN:
PART 74 – MATERIAL CONTROL AND
ACCOUNTING OF SPECIAL NUCLEAR
MATERIAL

Approved X Disapproved X Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached X None ___


Peter B. Lyons

SIGNATURE

11/3/08

DATE

Entered on "STARS" Yes No _____

Commissioner Lyons' Comments on SECY-08-0059

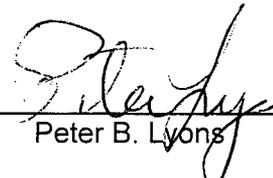
I approve in part and disapprove in part staff's recommended Option 1, which would create a new NRC SNM categorization table and a DPA requirement and revise and consolidate current MC&A requirements into 10 CFR Part 74. My comments on this paper were also informed by the September 15, 2008, supplement to the SECY paper. I appreciate staff efforts to inform this paper with the specifications in the November 18, 2005, Staff Requirements Memorandum for SECY-05-0143. I approve the staff proceeding to consolidate current MC&A requirements from 10 CFR Part 72 to 10 CFR Part 74, add general performance objectives to Part 74, remove some exemptions, add additional requirements for Categories I, II, and III facilities, and make other miscellaneous changes as discussed in staff's Option 4.

Consistent with past Commission direction, I do not approve adding americium and neptunium to the MC&A requirements at this time. Staff has indicated that no NRC or Agreement State licensee currently processes the quantity of these byproduct materials that could be used in a nuclear explosive device. As a result, the papers did not provide sufficient new justification to change past Commission direction on this issue. However, I support staff's considering americium and neptunium MC&A requirements as part of its efforts to develop a regulatory structure for reprocessing facilities or other new technologies that might generate much larger quantities of these byproduct materials. My support is contingent upon staff's working with the Executive Branch to address the consequences of imposing any new requirements on existing treaties and the international community.

I also support requiring Category I fuel fabrication facilities to undertake a Diversion Pathway Analysis as part of their detection and response program but do not support enrichment facilities undertaking this analysis. In my view, the types and quantities at domestic enrichment facilities simple do not justify this requirement.

DOE's existing categorization table is undergoing revision. Once this is complete, DOE will develop a revised categorization table and an implementation plan and then obtain operational experience starting sometime in 2009. Since DOE's application of its categorization table is a work in progress, there does not appear to be a compelling reason to support a regulatory overhaul to create a new SNM categorization table that would be informed by a DOE categorization table, which is undergoing some reexamination and revision. However, I may support the use of such a table once finalized, and if DOE demonstrates that the approach is credible. After DOE has gained some operational experience, staff should provide a Commission paper that describes DOE's program and implementation successes and hurdles. At that time, the paper should provide a staff recommendation on application of such a table to both current and potential new facilities.

Lastly, I believe that there are valid reasons for NRC's and DOE's security and MC&A programs to diverge, and I support staff continuing its efforts to share information with DOE on this important issue.


Peter B. Lyons
11/3/08
Date

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary
FROM: COMMISSIONER SVINICKI
SUBJECT: SECY-08-0059 – RULEMAKING PLAN:
PART 74 – MATERIAL CONTROL AND
ACCOUNTING OF SPECIAL NUCLEAR
MATERIAL

Approved XX In part Disapproved XX In part Abstain _____

Not Participating _____

COMMENTS: Below ___ Attached XX None ___



SIGNATURE

01/21/09

DATE

Entered on "STARS" Yes No _____

Commissioner Svinicki's Comments on SECY-08-0059
Rulemaking Plan: Part 74 – Material Control and Accounting of Special Nuclear Material

I approve in part and disapprove in part, the staff's proposed rulemaking plan for changes to 10 CFR Part 74, Material Control and Accounting (MC&A) of Special Nuclear Material. Specifically, I approve Option 4, but with exceptions, and disapprove the staff's recommended Option 1. In addition to the SECY paper itself, my views were informed by the staff's 15 September 2008 supplement to the paper (memo to the Commission from R. Zimmerman, "Attractiveness Approach to Categorization of Special Nuclear Material") and by a review of SECY-05-0143 and its resultant SRM which provided Commission direction to the staff for the development of this rulemaking plan. I find that – although the staff is attempting to follow Commission policy to make NRC regulations as risk-informed as possible -- staff's recommended Option 1 has departed in certain material aspects from the Commission direction provided in the previous SRM and this is, I suspect, why there is a continued lack of Commission support for many elements of staff's recommendation. My specific views follow.

I disapprove the adoption of a new categorization table. Recognizing that staff's intention here is both to inform current regulations with greater risk insights and also to conform NRC's regulations to certain U.S. Department of Energy orders and directives, staff also acknowledges that this undertaking may or may not result in any increase in safety and security at current NRC licensees and will most certainly require considerable effort on the part of both NRC and licensees to develop and implement. In the absence of better justification, I do not support initiating this effort.

I also disapprove the requirement for a new "diversion path analysis." The previous Commission SRM direction stated that "if the staff recommends requiring a Diversion Path Analysis (DPA), sufficient detail about the methodology for actually conducting the analysis should be provided in the rulemaking plan so that the Commission can make an informed decision." Based on SECY-08-0059 and its enclosure (the rulemaking plan), I do not find sufficient justification for the new requirement nor am I persuaded that the current licensing basis for existing facilities – which requires analysis of potential material diversion – is inadequate.

Finally, I disapprove expanding the MC&A requirements beyond special nuclear material. I note that the Commission's prior SRM unambiguously stated, "[t]he rulemaking plan should not include provisions to expand the scope of the NRC's MC&A program beyond special nuclear material." I support the prior Commission's view and do not support adding MC&A requirements for americium and neptunium. Staff has not demonstrated the merits of this step for current licensees and if such steps are believed to be appropriate for future applicants, such as fuel recycling facilities, this issue can be addressed in the future regulatory updates for such facilities or as part of the regulatory gap analysis for fuel recycling facilities already underway.

Although I support Option 4, *Rulemaking limited to revising and consolidating current MC&A regulations in Part 74*, I note staff's conclusion that "[t]he proposed and final rules under option 4 could be approved by the EDO." As I have noted, there were significant departures between the Commission's explicit SRM direction for the content of the proposed rulemaking plan and the plan submitted with SECY-08-0059. To keep these matters in firmer alignment going forward, I would propose that this rule not be issued under the authorities of the Executive Director for Operations, but rather that the proposed rule and draft final rule be submitted to the Commission for review and approval.



Kristine L. Svinicki 01/21/09