



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

December 2, 2010

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-10-0105

TITLE: FINAL RULE: LIMITING THE QUANTITY OF BYPRODUCT MATERIAL IN A GENERALLY LICENSED DEVICE (RIN 3150-A133)

The Commission (with Chairman Jaczko approving and Commissioners Svinicki, Apostolakis, Magwood, and Ostendorff approving in part and disapproving in part) acted on the final rule as recorded in the Staff Requirements Memorandum (SRM) of December 2, 2010.

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 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 Jaczko  
Commissioner Svinicki  
Commissioner Apostolakis  
Commissioner Magwood  
Commissioner Ostendorff  
OGC  
EDO  
PDR

## VOTING SUMMARY - SECY-10-0105

### RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACZKO	X				X	10/4/10
COMR. SVINICKI	X	X			X	11/19/10
COMR. APOSTOLAKIS	X	X			X	11/5/10
COMR. MAGWOOD	X	X			X	10/27/10
COMR. OSTENDORFF	X	X			X	10/27/10

### COMMENT RESOLUTION

In their vote sheets, Chairman Jaczko approved and Commissioners Svinicki, Apostolakis, Magwood, and Ostendorff approved in part and disapproved in part the final rule. Subsequently, the Commission acted on the final rule in as reflected an Affirmation Session on December 2, 2010.

**AFFIRMATION ITEM**

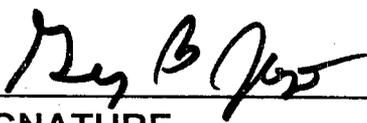
**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary  
FROM: Chairman Gregory B. Jaczko  
SUBJECT: SECY-10-0105 – FINAL RULE: LIMITING THE QUANTITY OF BYPRODUCT MATERIAL IN A GENERALLY LICENSED DEVICE (RIN 3150-A133)

Approved  Disapproved  Abstain

Not Participating

COMMENTS: Below  Attached  None

  
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SIGNATURE

  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No

**Chairman Jaczko's Comments on SECY-10-0105,  
"Final Rule: Limiting the Quantity of Byproduct Material in a Generally Licensed Device"**

I approve staff's recommendation to publish in the Federal Register the final rule that will amend 10 CFR 31 to limit the quantity of byproduct material contained in a generally licensed device to below one-tenth of the International Atomic Energy Agency (IAEA) Category 3 thresholds. I also approve the staff's recommendation to change the compatibility categories of 10 CFR 31.5(a), 10 CFR 31.5(c)(13)(i), and 10 CFR 31.6 from B to C.

This rule will improve accountability and control over these sources and reduce the potential for the aggregation of lower activity sources to higher activity levels. Requiring a specific license will provide an opportunity for a detailed review of the radioactive materials program proposed by the applicant, an opportunity to interact with the applicant, a regulatory decision as to whether to grant the license as requested or with modifications, and more routine inspections and enhanced security requirements. The threshold of 1/10 of Category 3 is a reasonable compromise between the need for increased safety and security, and the burden imposed by these requirements on affected licensees. As indicated in comments on the proposed rule by several Agreement States and the Organization of Agreement States, the rule will not impose a significant undue burden or hardship to implement.

The issue of security of radioactive material has received increased scrutiny for several years, and the Commission itself has indicated that Category 3 sources, in particular, may need stricter controls. In the SRM for SECY-05-0092, the Commission directed the staff to evaluate enhanced controls for sources below Category 2 thresholds. In response, in April of 2006, SECY-06-0094 discussed the need for providing enhanced controls for sources and recommended that general licenses be limited to sources smaller than one-half the Category 2 threshold. In the SRM for this SECY paper, the Commission disapproved the staff's recommendation and instead directed that the staff evaluate specific licensing of Category 3.5, and stated that if the staff had appropriate justification for a different threshold, the staff could propose that as an alternative recommendation in the rulemaking package. As eloquently stated by then-Commissioner McGaffigan in his vote directing the specific licensing of Category 3.5,

"Specific licensing brings with it far more control (and of course burden) for licensees. I believe that we should be specifically licensing all Category 3.5 sources... Some States already do this (and more)... NRC would have a much greater degree of control over these radionuclides with margin against any terrorist attempt to aggregate radionuclides of concern... In a post-9/11 world, a greater degree of control of such sources is entirely warranted... Used in a radiological dispersal device (RDD), some Category 3 sources could theoretically contaminate up to a half square kilometer with radioactivity above the EPA and DHS 2 rem/yr intermediate phase protective action

guide...The benefit of averting such an event in an urban setting will far outweigh any licensing costs."

In March 2007, the NRC Office of Inspector General (OIG) issued a report that synthesized the findings of previous OIG and Government Accountability Office (GAO) reports regarding byproduct material security. This report notes that "NRC has not fully adapted its byproduct material security approach to accommodate changes in threats to the Nation," and that "NRC's 'graded, risk-informed' approach discounts factors related to malevolent terrorist intentions." The recurring theme of the 2006 and 2007 OIG reports and the 2003, 2005, and 2006 GAO reports cited in this 2007 report was that NRC must increase the security provided by its materials program.

A watershed event in the area of source security for this agency then occurred later in 2007, when the GAO used the name of a bogus company to obtain a valid NRC materials license authorizing the possession of portable gauges containing radioactive sources. GAO was able to obtain this under our specific licensing program, which contains even more checks and balances than the general licensing program. GAO then altered the license to show that risk-significant quantities of material would easily be obtained by "shopping around" to different vendors.

This GAO sting led to a flurry of activity, including a Congressional hearing, recommendations from GAO for our materials security program, and a 2007 report from the Senate Permanent Subcommittee on Investigations (PSI). The PSI report states that "NRC licensing procedures governing Category 3 sources are not sufficiently rigorous. Category 3 sources deserve more stringent regulation because they are more dangerous than the current category scheme suggests... There is currently no mechanism to prevent malevolent actors from stockpiling numerous lower-risk sources well beyond the limits authorized in the license."

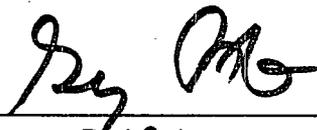
In response to the GAO and PSI reports, the staff developed an Action Plan to address security issues in our materials program (SECY-07-0147). That Action Plan included, among many other items, increased focus on Category 3 sources and a review of the general license framework. The implementation of this Action Plan rightfully became a high priority for the agency. As noted by the Commission in the SRM for this SECY paper, "Successful implementation of this action plan in a timely manner is essential for the NRC... The staff should complete actions as soon as possible and not wait for perfect solutions."

The Commission, in April 2008, also held a public meeting with the staff to discuss materials licensing and security. Then-Chairman Klein focused specifically on the weaknesses in the program that could be exploited, asking "[W]hat's going to be the next GAO sting?" Staff's response was succinctly put: "If I had to guess, it would be general licenses." I think that staff is correct that the general licensing program, as currently structured, represents a real vulnerability in our security program that could easily be exploited.

In addition, under the current rules, two general licenses (specifically 10 CFR 31.5 and 40.22) have the potential to authorize possession and use of at least Category 2 quantities, and general licensees do not undergo fingerprinting or background checks; therefore, this could lead to a situation where a general licensee could have Category 2 sources with no regulatory review or related security measures. In a related matter, 10 CFR 110 was revised earlier this year to remove the requirement for specific import licenses for Category 1 and 2 sources. The Federal Register Notice for that final rule indicates that this action was based partly on the reasoning that licensees receiving such high-risk sources would undergo fingerprinting and background checks, which, as stated above, holders of these types of sources do not undergo. This proposed rule would correct that deficiency.

Last year, in the May 2009 SRM for SECY-08-0137, the Commission approved the staff's recommendation to publish the proposed rule that would require specific licensing for sources that exceed that Category 3.5 threshold. The Commission directed that staff reach out to general licensees to ensure they are cognizant of the possible impacts resulting from this rulemaking process and that the compliance date for existing holders of generally licensed devices that would be subject to the new requirements should be set at 90 days after the effective date. As noted by Commissioner Svinicki in her vote, this would allow "a realistic amount of time for communications with affected general licensees to occur and for them to complete the steps necessary to file their applications." I agree with Commissioner Svinicki that such time is needed. For the final rule, the staff has proposed an implementation date of 12 months after the effective date of the rule, in order to provide enough time for an existing licensee to decide to submit an application for a specific license or to properly disposition the source. This is a reasonable approach.

In the recently issued 2010 report Radiation Source Protection and Security Task Force Report that was delivered to the President and Congress, the interagency Task Force lists this rulemaking under "Accomplishments", stating that, "As an integral part of the action plan, the NRC initiated the General License Rulemaking to reduce the chances for aggregation of generally licensed material into risk-significant quantities." I strongly agree that this is an integral part of the agency's efforts to increase the effectiveness of its materials security program. Over the last several years, the agency has taken significant steps to strengthen and improve the security of specific licenses, such as pre-licensing visits for licenses for Category 1 and 2 sources, and I commend the staff for their hard work and diligence. Now this final rule will take the next logical step of strengthening the materials security by appropriately adjusting the general licensing program.

  
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Gregory B. Jacko

  
\_\_\_\_\_  
Date

**AFFIRMATION ITEM**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary  
FROM: Commissioner Svinicki  
SUBJECT: SECY-10-0105 – FINAL RULE: LIMITING THE QUANTITY OF BYPRODUCT MATERIAL IN A GENERALLY LICENSED DEVICE (RIN 3150-A133)

Approved  X  In Part      Disapproved  X  In Part      Abstain \_\_\_\_\_  
Not Participating \_\_\_\_\_

COMMENTS: Below \_\_\_ Attached  X  None \_\_\_

  
\_\_\_\_\_  
SIGNATURE

11/9 /10  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  ✓  No \_\_\_

**Commissioner Svinicki's Comments on SECY-10-0105**  
**Final Rule: Limiting the Quantity of Byproduct Material in a Generally Licensed Device**

On April 8, 2009, in response to SECY-08-0137, I voted to approve publication in the *Federal Register* of the proposed rule on this topic, amending 10 CFR Part 31, for the purpose of receiving public comment. After thorough consideration of the resulting public comment record, the NRC staff's analysis of those comments, and the NRC staff non-concurrence accompanying this draft final rule, which was provided to the Commission, I approve in part and disapprove in part the staff's proposal to publish the final rule. I disapprove the staff's proposal to limit the quantity of byproduct material contained in generally licensed devices under 10 CFR Part 31 to one-tenth of the International Atomic Energy Agency Category 3 threshold. I join a majority of my colleagues, however, in approving the revision of the compatibility category of certain NRC regulations in 10 CFR 31.5 and 31.6 from Compatibility "B" to Compatibility "C" as proposed by the staff in the draft final rule.

I studied carefully the issues raised regarding changing the compatibility category for the provisions outlined in the draft final rule. On balance, I am persuaded that the Compatibility "C" designation, in this case, will allow Agreement States the flexibility to enhance accountability, address issues specific to their jurisdictions, continue programs that have proven beneficial, and to adopt requirements based on their specific circumstances and needs. Because the concerns about negative effects of this change have merit, however, the staff should report back to the Commission within two years of the issuance of the SRM resulting from Commission action on SECY-10-0105, with a description of which Agreement States, if any, acted to modify their programs as a result of the change in compatibility category, how the programs were modified, and an analysis of the impacts to regulated entities – particularly those operating on a multi-state basis.

Finally, although perhaps mooted by my disapproval of elements of the draft final rule, I would not have been able to support the required finding in this case, that under the Regulatory Flexibility Act of 1980, the rule "would not result in a significant economic impact on the affected [small] entities." The staff's analysis, in my view, did not provide sufficient convincing rebuttal to the public comment received to the contrary.

  
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Kristine L. Svinicki                      11/19/10

**AFFIRMATION ITEM**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary  
FROM: Commissioner Apostolakis  
SUBJECT: SECY-10-0105 – FINAL RULE: LIMITING THE QUANTITY OF BYPRODUCT MATERIAL IN A GENERALLY LICENSED DEVICE (RIN 3150-A133)

Approved  X  Disapproved  X  Abstain

Not Participating

COMMENTS: Below   Attached  X  None



SIGNATURE



DATE

Entered on "STARS" Yes  X  No

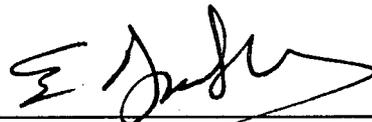
**Commissioner Apostolakis' comments on -SECY-10-0105 Final Rulemaking Limiting the quantity of RAM under a General License**

I approve staff's recommendation to change the compatibility category from B to C so individual Agreements States can have flexibility to implement additional regulatory requirements for general licensees as they deem appropriate for their radiation protection program. As staff has noted, this action would facilitate compliance with the Commission's Policy Statement on Adequacy and Compatibility of Agreement State Programs. Staff should update the Commission Policy Statement on Adequacy and Compatibility of Agreement State Programs and associated guidance documents to include both safety and security considerations in the determination process. Regarding 10 CFR § 31.6, staff should monitor any unforeseen transboundary safety and security impact that may result from the shift in compatibility and recommend corrective action to the Commission.

Otherwise, I disapprove staff's recommendations in this paper. I agree with Commissioners Magwood and Ostendorff that the paper does not present a robust safety or security argument to proceed with issuance of the final rule.

At issue is the regulation of an unquantified potential for the aggregation of lower activity sources to IAEA Category 1 and 2 quantities. A more efficient and effective use of resources could be the broader use of the General Licensing Tracking System. I understand that the 10 CFR § 31.5 general license requires, in part, that a general licensee report receipt and transfer, of certain radionuclides that are much lower in activity than the IAEA Category 1 and 2 thresholds and respond to NRC's annual inventory and fee requests. The general license requirements also impose, 1) design and use requirements to ensure safe use of the devices by person with little to no radiation protection training, 2) restrictions on a device not in use, and 3) quarterly physical inventories if the device is in standby for future. In total, the general license provision continues to provide for safe use of radioactive material and when combined with the General License Tracking System can address the issue of aggregation of sources. I approve the staff's leveraging of the General License Tracking System to monitor for aggregation of sources of concern and taking action as appropriate to increase security by the issuance of orders to the general licensees that possess IAEA Category 1 and 2 quantities. Staff should also revisit its position on inspecting general licensees possibly and consider both safety and security risk information to inform a routine and initial inspection program.

Until such time as the Commission decides to impose security requirements on other than IAEA Category 1 and 2 source thresholds, I am willing to consider a rulemaking that restricts these source thresholds from use under the general license provisions.



George Apostolakis

11/5/10

Date

**AFFIRMATION ITEM**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MAGWOOD  
SUBJECT: SECY-10-0105 – FINAL RULE: LIMITING THE QUANTITY OF BYPRODUCT MATERIAL IN A GENERALLY LICENSED DEVICE (RIN 3150-A133)

Approved  Disapproved  Abstain

Not Participating

COMMENTS: Below  Attached  None

  
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SIGNATURE

27 October 2010  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No

**Commissioner Magwood's Comment on**  
**SECY-10-0105- Final Rule: Limiting the Quantity of**  
**Byproduct Material in Generally Licensed Device**

I appreciate the staff's efforts to respond to the various concerns expressed by members of the U.S. Senate, the U.S. Government Accountability Office, and various Agreement States regarding the safety and security of devices that are possessed under the agency's General License program. I, like all of my colleagues on the Commission, recognize that the threats to our security are quite real and very active. However, I am also sensitive to the concerns of many members of the public that the returns on increasing some measures to enhance security are becoming limited; meanwhile the regulatory burden on daily life and commerce associated with these enhanced measures is steadily increasing. In my view, additional measures should be taken only where a clear analytical basis exists to support the proposed action.

I do not believe that the staff's proposed final rule to amend 10 CFR Part 31 passes this test and I, therefore, do not approve its publication. The final rule would amend 10 CFR Part 31 to limit the quantity of byproduct material contained in generally licensed devices to below one-tenth (1/10) of the International Atomic Energy Agency (IAEA) Category 3 thresholds and to require individuals possessing devices with quantities of byproduct material at or above 1/10 of Category 3 threshold values to apply for and obtain a specific license. I am disapproving the publication of the rule because I do not believe staff has presented a strong technical basis for these actions and has not developed a clear, convincing analysis that demonstrates the risks of theft or diversion presented by devices possessed under a General License.

My conclusions, however, dismiss neither the seriousness of the threat nor the possibility that additional measures may be needed to assure public health and security. Staff is encouraged to present a more detailed analysis to support the Commission's consideration of this matter. In addition, I believe staff must do a far more rigorous analysis of alternative actions that have been suggested by various commenters. If analysis supports action, it may prove more appropriate to consider the requirement of features to make sources more difficult to remove from devices. In SECY-10-0105, staff makes conflicting comments about the efficacy of such measures, which appears to highlight the lack of a detailed analysis. In addition, staff should also consider the option of establishing a general licensee inspection program, which, perhaps, should be pursued in any case.

Moreover, I am not convinced that it is reasonable to require specific licenses for possession of these devices. During formation of the National Source Tracking System, the Commission considered including certain quantities of Category 3 material (and therefore, specific licensing of those sources) in the tracking system. However, the Commission found that the current threat environment did not support a requirement to track Category 3 sources in the NSTS. Should the threat environment change or should staff present new analysis that supports any of the changes discussed in SECY-10-0105, the Commission should consider modifications to the current program.

I do, however, approve the staff's recommendation to change the compatibility categories of 10 CFR 31.5(a), 10 CFR 31.5(c)(13)(i), and 10 CFR 31.6 from B to C. While consideration of Federal action on this issue requires further analysis, it would be presumptuous of the Commission to stand in the way of additional measures that Agreement States believe—based on local concerns and circumstances—may be needed.

I note that when the Commission last acted with regard to this issue, it was concerned about the "significant transboundary implications" associated with this rule. However, over the years, states have already taken a variety of actions that are not consistent with the rule—despite its designation as "compatibility category B." As a result, the practical impact of different practices in different states has already been absorbed and does not appear to cause notable difficulties for either security or commerce. I believe it is time to acknowledge this reality and empower Agreement States to continue the practices they have already implemented and take additional steps they deem appropriate based on local circumstances.

 10/27/10

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William D. Magwood, IV Date

**AFFIRMATION ITEM**

**RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER OSTENDORFF

SUBJECT: SECY-10-0105-FINAL RULE: LIMITING THE  
QUANTITY OF BYPRODUCT MATERIAL IN A  
GENERALLY LICENSED DEVICE (RIN 3150-A133)

Approved  X  Disapproved  X  Abstain

Not Participating

COMMENTS: Below   Attached  X  None

W. Ostendorff  
SIGNATURE

10/27/10  
DATE

Entered on "STARS" Yes  x  No

**Commissioner Ostendorff's Comments on SECY 10-0105, "Limiting the Quantity of Material in a Generally Licensed Device"**

I approve in part and disapprove in part the staff's proposal to publish the final rule to amend Part 31 of the Code of Federal Regulations. I disapprove the staff's proposal to limit the quantity of byproduct material contained in generally licensed devices under 10 CFR 31 to one-tenth of the International Atomic Energy Agency Category 3 threshold. However, I approve of the staff's recommendation to revise the Compatibility Category of certain NRC current regulations in 10 CFR 31.5 and 31.6 from Compatibility "B" to Compatibility "C".

The efficiency principle of good regulation indicates that regulatory activities should be consistent with the degree of risk reduction they provide. In this case, I find that there is not a clear safety risk reduction or security enhancement that would justify the proposed threshold for requiring a specific license. The primary issue that the rule appears to address is the potential for aggregation of sources for malevolent purposes. The regulatory principle of reliability suggests that our regulations should be based on the best available knowledge. I found no concrete information in the rulemaking package or through briefings with the staff to indicate that such an aggregation scenario is likely or that the rule is based on specific knowledge or information other than the notion that such aggregation is possible.

Available information indicates that the current safety and security requirements for these generally licensed devices are adequate. Historically there have been very few reports involving the theft of devices which are generally licensed under 10 CFR 31.5. Further, NRC regulations require that general licensees who possess certain thresholds and isotopes complete an annual source inventory which is submitted to the NRC. As such, the existing requirements already largely support the control and accounting of these sources. Beyond these requirements, and consistent with recommendations from the Government Accountability Office and Office of Inspector General, the NRC staff have taken significant measures to enhance the security of radioactive sources since the 2006-2007 timeframe, including implementation of pre-licensing guidance for specifically licensed sources. These measures have enhanced the security of sources where necessary. The NRC's actions with regard to source security should continue to focus on Category 1 and 2 sources, consistent with the most recent radiation source protection task force recommendation. As there are very few if any Category 2 generally licensed devices in use, I see no need at this time for additional requirements.

That being said, I do appreciate and support the staff's efforts to provide the Agreement States with the flexibility to impose more restrictive requirements than NRC regulations, in cases where the States deem it appropriate based on local considerations. Many Agreement States have imposed more restrictive licensing requirements for many of these sources for years and no significant transboundary issues have resulted. I therefore support revising the Compatibility Category of 10 CFR 31.5(a), 10 CFR 31.5(c)(13)(i), and 10 CFR 31.6, from "B" to "C" as proposed by the staff.