



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

January 4, 2005

SECRETARY

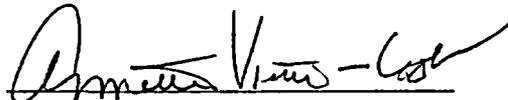
COMMISSION VOTING RECORD

DECISION ITEM:      SECY-04-0223

TITLE:                      REQUEST FOR APPROVAL OF STAFF COMMENTS ON  
THE 2005 RECOMMENDATIONS OF THE  
INTERNATIONAL COMMISSION ON RADIOLOGICAL  
PROTECTION

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of January 4, 2005.

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 Diaz  
         Commissioner McGaffigan  
         Commissioner Merrifield  
         OGC  
         EDO  
         PDR

VOTING SUMMARY - SECY-04-0233

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. DIAZ	X				X	12/27/04
COMR. McGAFFIGAN	X				X	12/14/04
COMR. MERRIFIELD	X				X	12/09/04

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved 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 January 4, 2005.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: CHAIRMAN DIAZ

SUBJECT: **SECY-04-0223 - REQUEST FOR APPROVAL OF  
STAFF COMMENTS ON THE 2005  
RECOMMENDATIONS OF THE INTERNATIONAL  
COMMISSION ON RADIOLOGICAL PROTECTION**

Approved xx *NJD* Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

Not Participating \_\_\_\_\_

COMMENTS:

See attached comments.

*Nils J Diaz*  
\_\_\_\_\_  
SIGNATURE

12/27/04  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

**CHAIRMAN DIAZ'S COMMENTS ON SECY-04-0223, REQUEST FOR APPROVAL OF STAFF  
COMMENTS ON THE 2005 RECOMMENDATIONS OF THE INTERNATIONAL COMMISSION  
ON RADIOLOGICAL PROTECTION**

I commend the staff for providing a thorough analysis of the draft ICRP 2005 Recommendations and for compiling inputs from a variety of stakeholders into a coherent set of comments. I approve the staff's plan to transmit comments to the ICRP, subject to the following paragraphs.

I fully support the staff's position that ICRP should delay finalizing the draft 2005 Recommendations for two years to allow the "foundation documents" to be reviewed by the international community, and to permit consideration of the results of the BEIR VII study and the next UNSCEAR report. Also, I continue to believe that it is not necessary to develop a framework for radiological protection of non-human species, and I agree with the staff that Section 11 and Appendix B of the draft Recommendations should be deleted.

In its specific comment 14, staff recommends that the ICRP clearly describe the scientific basis for its decision to more emphatically endorse the linear, no-threshold dose-response model. The staff should remain firm as it addresses this issue with the ICRP. Related to this, the staff should revise general comment 7 to clearly reflect the path the NRC has taken in the ongoing rulemaking for controlling the disposition of solid materials, i.e., that optimization should not be required for materials that are to be released from regulatory control.

The staff should continue to monitor ICRP activities and review ICRP documents, and, consistent with previous direction, should continue to raise any potential policy issues to the Commission. In these interactions, the staff should reinforce the principle that radiological protection recommendations should enhance public health and safety, and the costs of implementing the recommendations should be commensurate with their potential benefits.

*NJD*  
12-27-04

NOTATION VOTE  
RESPONSE SHEET

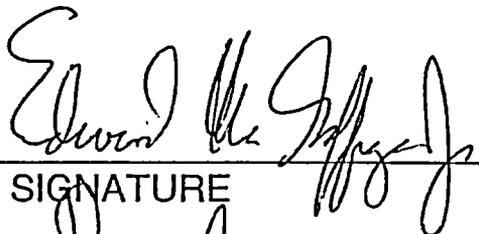
TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MCGAFFIGAN  
SUBJECT: **SECY-04-0223 - REQUEST FOR APPROVAL OF  
STAFF COMMENTS ON THE 2005  
RECOMMENDATIONS OF THE INTERNATIONAL  
COMMISSION ON RADIOLOGICAL PROTECTION**

w/comments and edits

Approved  Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_  
Not Participating \_\_\_\_\_

COMMENTS:

See attached comments and edits.

  
\_\_\_\_\_  
SIGNATURE  
December 19, 2004  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No \_\_\_\_\_

Commissioner McGaffigan's Comments on SECY-04-0223

I approve the staff's plans to send comments to the International Commission on Radiological Protection (ICRP) regarding its 2005 recommendations subject to two edits which are attached. First, I would like to thank the Advisory Committee on Nuclear Waste (ACNW) for its detailed review of the ICRP recommendations and for the clear and well written letter report that we received dated November 3, 2004. This effort by the ACNW working group was beneficial to both the staff and the Commission.

With regard to the draft letter to ICRP, I agree with the staff's comments. In particular, I agree with the removal of Section 11 and Appendix B regarding the protection of non-human species. As I stated in my vote on SECY-04-0055, I do not believe that developing additional recommendations or standards for flora and fauna is necessary. I believe that the strict standards that are currently in place for the protection of humans are also fully protective of non-human species. The staff should continue to express the Commission's concerns about this course of action to the ICRP and the IAEA in the appropriate forums.

I also strongly agree with the staff that the ICRP should delay finalization of the 2005 recommendations until after all of the technical supporting documents have been reviewed and finalized. Until the supporting documents are made publicly available, a complete and thorough review of the recommendations cannot be performed.



2005 Recommendations of the International  
Commission on Radiological Protection

The U.S. Nuclear Regulatory Commission (NRC) would like to thank the International Commission on Radiological Protection (ICRP) for the opportunity to provide comments on the draft 2005 Recommendations of the ICRP. The opportunity to submit and review other stakeholder comments on Commission documents is greatly appreciated. The NRC's was established to regulate the civilian commercial, industrial, academic, and medical uses of nuclear materials to enable our nation to use radioactive materials for beneficial civilian purposes while ensuring that public health and safety, common defense and security, and the environment are protected. We believe this mission is consistent with the aim and goals of the ICRP. With this in mind, the NRC has reviewed the draft 2005 ICRP Recommendations and is providing the following general and specific comments for consideration by the Main Commission. X

It is the NRC's understanding that the "foundation" documents have been delayed and may not be available until Spring 2005, the ICRP plans to delay issuance of the draft 2005 Recommendations until 2006 or later, and the ICRP intends to solicit another round of stakeholder comments after the draft 2005 Recommendations are revised. The NRC fully endorses this plan of action. The intent of the general and specific comments provided is to support this decision and assist the ICRP Secretariat and Main Commission refine and simplify the current system of radiological protection while maintaining stability in national and international regulations where practicable. We look forward to future opportunities to provide comment and interact with the ICRP as the pending foundation documents are made available for public comment and these draft recommendations are further considered.

General Comments

1. There are a number of instances where the draft 2005 Recommendations appear to be a "work-in-progress". There are at least four major "foundation" documents that should provide the technical basis for the draft 2005 Recommendations, but these documents are not available for stakeholder review, and will not be available for review until after the next Main Commission meeting in March 2005. Consequently, a thorough review of the draft 2005 Recommendations cannot be completed until the information contained in these documents is publically available. The NRC believes that the ICRP should delay finalizing the draft 2005 Recommendations until the "foundation" documents have been completed, posted on the ICRP's Web site, and reviewed by the international community. A 2-year delay also would afford the ICRP the opportunity to review the U.S. National Academies' Biological Effects of Ionizing Radiation report (BEIR VII) to ensure consistency between that report and the ICRP's consolidated recommendations. Similarly, the next United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) report is expected to provide a comprehensive review of new scientific data on the biological effects of ionizing radiation and should be considered by the ICRP before it finalizes its' recommendations.

2. The draft 2005 Recommendations, when finalized, will document an improved understanding of the health effects of ionizing radiation exposure which should improve realism in conducting risk informed regulation. However, the draft 2005 Recommendations will not substantially improve public health and safety for NRC-licensees. The majority of occupational

dose, or provides a framework for the appropriate application of the concept. The ICRP is encouraged to clarify the conceptual considerations as well as in practical implementation of collective dose and the dose matrix.

7. The ICRP has provided significant new recommendations in the area of exemption and exclusion. However, the draft 2005 Recommendations do not present a clear and consistent approach to managing low doses and controlling small quantities of radioactive material. For example, the ICRP system of radiological protection generally applies to any actual or potential exposure, whatever its magnitude. In the case of very low levels of exposure (e.g.,  $<10 \mu\text{Sv}$  per yr) from radioactive materials, application of the optimization principle would indicate that no additional protective action needs to be undertaken. Yet, some items will be excluded from regulatory control without regard to the question of whether anything within reason can be done to control them. Finally, the draft 2005 Recommendations suggest that materials with activity concentrations less than or equal to  $<10 \mu\text{Sv}$  per yr may be considered to be nonradioactive and thus excluded from radiological control. The ICRP is encouraged to reexamine the conflicts within the numeric and conceptual recommendations throughout the document and present a clear and coherent approach.

8. NRC is unaware of <sup>any</sup> evidence that suggests the existing regulatory framework to protect the public is inadequately protective of other species. In the absence of such evidence, the effort to develop a separate framework for the protection of other species will result in a significant expenditure of resources and is likely to detract from on-going efforts to improve, integrate, and harmonize the existing framework of protection of the public health and safety and the environment. The development of specific recommendations/standards for the protection of non-human species should be left to individual governments, so that flexibility in implementation is maintained at the national level. Therefore, the NRC strongly recommends that Section 11 and Appendix B should be removed from the document. If the Section must be retained, it is suggested that a caveat be inserted to indicate that this is a work-in-progress, and the Section is intended mainly to indicate a future direction of ICRP. X

#### Specific Comments:

##### 1. Page 12, Paragraph 13:

It is recommended that the term "lifestyles" be removed from this paragraph. This may be interpreted as encouraging the frivolous use of radiation for purposes for which such use is not necessary. The "and lifestyles" could be deleted without detriment to the rest of the sentence.

##### 2. Page 12, Paragraph 14:

The first sentence should be modified. Scientific data cannot be used to develop ICRP's primary aim, since such data is value-neutral. Therefore, the statement that "This aim cannot be achieved solely on the basis of scientific data" is incorrect. The sentence should indicate that the draft 2005 Recommendations represent value judgements based on scientific data.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary  
FROM: COMMISSIONER MERRIFIELD  
SUBJECT: **SECY-04-0223 - REQUEST FOR APPROVAL OF  
STAFF COMMENTS ON THE 2005  
RECOMMENDATIONS OF THE INTERNATIONAL  
COMMISSION ON RADIOLOGICAL PROTECTION**

Approved  Disapproved  Abstain

Not Participating

COMMENTS:

*Approved, subject to the attached comments.*

  
\_\_\_\_\_  
SIGNATURE

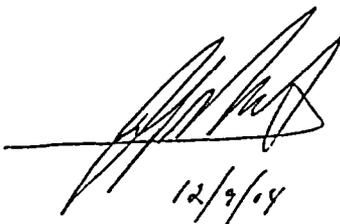
*12/9/04*  
\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No

Comments from Commissioner Merrifield on SECY-04-0223:

I approve, with clarification provided below, the staff recommendations in SECY-04-0223 concerning staff comments on the 2005 recommendations of the International Commission on Radiological Protection (ICRP). I compliment the staff for their efforts to reach out to appropriate stakeholders and obtain their input on this important matter. There are some staff recommendations that I strongly support and I will highlight a few of those issues. First, I fully agree that the document provides useful background and supporting material on the health effects of ionizing radiation. But if the document does not provide a significant improvement in safety, the ICRP should reconsider the need for many of the changes that will necessitate modifications of existing regulatory programs that already achieve the protection objectives of the ICRP. Second, the ICRP should not be moving away from risk based considerations for setting the constraint values. Third, I strongly support not publishing the recommendations until the supporting documents are reasonably complete and peer reviewed. Fourth, the ICRP should provide clear guidance on how collective dose should be applied and, more importantly, the circumstances when the collective dose concept should not be applied. Finally, I strongly support the staff recommendation to delete the section on protecting the non-human species as this topic is not fully developed at this time.

Two staff recommendations which require clarification are general comment number 7 and specific comment number 46. General comment number 7 reads "The ICRP is encouraged to reexamine the conflicts within the numeric and conceptual recommendations throughout the document and present a clear and coherent approach." The staff comment solicits consistency in the ICRP approach but does not state a preference from our perspective. I agree that the comment is valid but it should also state what we would prefer to see in the next draft. The staff recommendation includes a discussion of optimization and exemption but does not clearly state that the NRC supports the concept of exemption. In fact, the statements in this recommendation imply that the optimization principal should apply even to exceptionally low levels of radiation because some reasonable things may be possible in order to control the material and reduce exposure further. Even specific comment number 46 implies that some optimization may be necessary for material with radioactivity below the exempt value and ICRP should provide guidance for when no further optimization efforts are needed. I disagree. If the exemption value is set at an appropriate number, there should be no further need for regulatory control from a radiological perspective and there should be no further need for optimization efforts. General comment number 7 should clearly indicate that the Commission supports the concept of exemption, there should be no regulatory requirements from a radiological perspective for material with radioactivity below the exempt values, and there should be internal consistency in the ICRP document. There may be some levels above the exemption constraint where further optimization is not practical and ICRP should provide some guidance in this area. In addition, the inconsistencies in the document with some table values requiring regulatory action for material below the exemption value should be corrected. Specific comment number 46 should read that the value chosen for exemption should be at a level where no further regulatory controls or optimization is necessary from a radiological perspective. The document should be revised to eliminate any inconsistencies between the exemption values and minimum constraint values.



12/9/04