



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 2, 2009

SECRETARY

COMMISSION VOTING RECORD

DECISION ITEM: SECY-08-0197

TITLE:                    OPTIONS TO REVISE RADIATION PROTECTION  
                              REGULATIONS AND GUIDANCE WITH RESPECT TO THE  
                              2007 RECOMMENDATIONS OF THE INTERNATIONAL  
                              COMMISSION ON RADIOLOGICAL PROTECTION

The Commission (with Chairman Klein and Commissioners Jaczko and Svinicki agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of April 2, 2009. Commissioner Lyons approved in part and disapproved in part.

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 Klein  
      Commissioner Jaczko  
      Commissioner Lyons  
      Commissioner Svinicki  
      OGC  
      EDO  
      PDR

VOTING SUMMARY - SECY-08-0197

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. KLEIN	X				X	3/26/09
COMR. JACZKO	X				X	2/11/09
COMR. LYONS	X	X			X	2/20/09
COMR. SVINICKI	X				X	3/4/09

COMMENT RESOLUTION

In their vote sheets, Chairman Klein and Commissioners Jaczko and Svinicki approved the staff's recommendation and provided some additional comments. Commissioner Lyons approved in part and disapproved in part. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on April 2, 2009.

**NOTATION VOTE**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary

**FROM:** CHAIRMAN KLEIN

**SUBJECT:** SECY-08-0197 – OPTIONS TO REVISE RADIATION PROTECTION REGULATIONS AND GUIDANCE WITH RESPECT TO THE 2007 RECOMMENDATIONS OF THE INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

Approved  X  Disapproved      Abstain    

Not Participating    

COMMENTS: Below      Attached  X  None    



\_\_\_\_\_  
SIGNATURE

3/26/2009

\_\_\_\_\_  
DATE

Entered on "STARS" Yes  No

**Chairman Klein's Comments on SECY-08-0197  
Options to Revise Radiation Protection Regulations and Guidance with  
Respect to the 2007 Recommendations of the  
International Commission on Radiological Protection**

I approve the staff's recommended Option 3 to immediately begin engagement with stakeholders and interested parties to initiate development of the technical basis for possible revision of the NRC's radiation protection regulations to achieve greater alignment with the 2007 recommendations of the International Commission on Radiological Protection (ICRP) contained in ICRP Publication 103.

The staff and the Advisory Committee on Reactor Safeguards (ACRS) agree that the current NRC regulatory framework continues to provide adequate protection of the health and safety of workers, the public, and the environment. Therefore, from a safety regulation perspective, ICRP Publication 103 proposes measures that go beyond what is needed to provide for adequate protection. This point should be emphasized when engaging stakeholders and interested parties, and thereby focus the discussion on discerning the benefits and burdens associated with revising the radiation protection regulatory framework.

I am concerned about the potential impact of effectively lowering the occupational dose limit to 2 rem (20 mSv) per year. The staff notes that some licensees in the medical and industrial sectors regularly exceed doses of 2 rem/yr. Some of the practitioners in these fields, such as those who work with accelerators and x-ray machines, are not governed by the Atomic Energy Act and are regulated by States, most of whom use 10 CFR Part 20 to regulate radiation protection regardless of the source of radiation. Changing the occupational dose limit could have a profound impact on individual livelihoods and cause inefficiency in the industrial and medical communities, which would translate into added costs, all of which would eventually be passed on to consumers. In developing the technical basis for rulemaking, the staff should examine how lower dose limits have affected the medical and industrial sectors in countries that have implemented them.

Constraints can be beneficially applied in radiation protection, and licensees should have the flexibility to set and use them to maximize the effectiveness and efficiency of their programs. I share Commissioner Svinicki's view that the regulatory imposition of constraints would appear to be an overreaching insertion of regulatory standards into the licensee's management of its radiation protection program.

I agree with the ACRS that there is no evidence that the current set of radiation protection controls is not protective of the environment, and that the NRC should not develop separate radiation protection regulations for plant and animal species. I agree with Commissioner Svinicki that the staff should continue to monitor international developments in this regard and keep the Commission informed.



Dale E. Klein

3/26/2009

**NOTATION VOTE**

**RESPONSE SHEET**

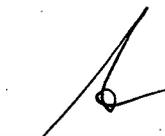
**TO:** Annette Vietti-Cook, Secretary  
**FROM:** COMMISSIONER JACZKO  
**SUBJECT:** SECY-08-0197 – OPTIONS TO REVISE RADIATION PROTECTION REGULATIONS AND GUIDANCE WITH RESPECT TO THE 2007 RECOMMENDATIONS OF THE INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

Approved  X  Disapproved       Abstain      

Not Participating      

COMMENTS: Below  X  Attached       None      

I approve the staff's recommendation of Option 3 to initiate stakeholder and interested party interactions to identify and develop regulatory issues and options, and to initiate development of a technical basis needed for rulemaking. I believe that the Agency should move towards greater alignment with ICRP Publication 103. The staff should provide the Commission with a proposed rule once the technical basis has been developed or at whatever point the staff deems appropriate.

  
\_\_\_\_\_  
SIGNATURE

02/11/2009  
DATE

Entered on "STARS" Yes  X  No

**NOTATION VOTE**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary

**FROM:** COMMISSIONER LYONS

**SUBJECT:** SECY-08-0197 – OPTIONS TO REVISE RADIATION PROTECTION REGULATIONS AND GUIDANCE WITH RESPECT TO THE 2007 RECOMMENDATIONS OF THE INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

Approved  X in part  Disapproved  X in part  Abstain \_\_\_\_\_

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

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

  
Peter B. Lyons  
SIGNATURE

21 26  /09 \_\_\_\_\_  
DATE

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

**Commissioner Lyons' Comments on SECY-08-0197**

I approve in part and disapprove in part staff's recommendation to proceed with Option 3. This Commission paper provides a robust discussion of the potential revision of NRC regulations and guidance for radiation protection to address the recommendations in ICRP Publication 103. I appreciate staff's efforts in the development of this Commission Paper. I approve staff engaging stakeholders and interested parties to gather input on the issues, options and impact information for revising NRC regulations to address the recommendations in ICRP Publication 103. I disapprove the development of technical basis for this rulemaking at this time.

I believe that it is important to gather and carefully weigh stakeholder input before proceeding on this significant regulatory revision to our basic radiation protection standards in Part 20. Our current regulations have proven to be protective of public health and safety and the environment. I am concerned that the costs involved in revising our regulations, policies and procedures and its impact on the regulated community will not improve the protection of licensees and the public. Since Part 20 affects a spectrum of fuel cycle and materials licensees in addition to those licensed under Part 50, I believe that it is important for us to gather input from the Agreement States and those licensees on the potential impacts of incorporating ICRP Publication 103 recommendations into Part 20 before developing a technical basis. Staff has noted that certain materials necessary to finalize the technical basis will not be available until 2011 or later. This should provide sufficient time for staff to gather input from the States and other stakeholders to understand the impacts of greater alignment with ICRP Publication 103 recommendations given current radiation protection practices in this country as well as other stakeholder interests.

  
Peter B. Lyons      2/20/09  
Date

**NOTATION VOTE**

**RESPONSE SHEET**

**TO:** Annette Vietti-Cook, Secretary

**FROM:** COMMISSIONER SVINICKI

**SUBJECT:** SECY-08-0197 – OPTIONS TO REVISE RADIATION PROTECTION REGULATIONS AND GUIDANCE WITH RESPECT TO THE 2007 RECOMMENDATIONS OF THE INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

Approved XX Disapproved \_\_\_\_\_ Abstain \_\_\_\_\_

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

COMMENTS: Below \_\_\_ Attached XX None \_\_\_

  
\_\_\_\_\_  
SIGNATURE

03/4/09  
\_\_\_\_\_  
DATE

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

**Commissioner Svinicki's Comments on SECY-08-0197**  
**Options to Revise Radiation Protection Regulations and Guidance with respect to the**  
**2007 Recommendations of the International Commission on Radiological Protection**

I approve staff's recommended Option 3, to begin conducting an open dialogue with the general public, NRC licensees, other Federal agencies, State and local governments, Agreement States, Native American tribes, industry organizations, industry workers, technical societies, citizen groups, and other groups with the goal of moving towards fuller alignment of NRC's regulatory framework, as appropriate and where scientifically-justified, with the recommendations in International Commission on Radiological Protection (ICRP) Publication 103.

I have also evaluated the thoughtful cautions of Commissioner Lyons, expressed in his vote, against the development of a technical basis for rulemaking as an action that may be premature at this time. As staff has acknowledged, the ICRP is still in the process of preparing updated dose conversion factors, many of which, for the more commonly used radionuclides, will not be available until sometime between 2012 and 2014. Nonetheless, I believe that staff should proceed with the development of the technical basis for rulemaking because it is needed as a framework within which the open dialogue can be conducted – a way to give specificity to the exploration of issues and to the development of options for moving forward. In the absence of such a framework, I am concerned that the open dialogue might proceed as a shapeless discussion of theories and concepts.

Additionally, although not matters before the Commission in this paper, I will comment on two areas of concern related to issues in ICRP Publication 103. First, the publication discusses the concept of developing radiation protection standards for plant and animal species. My views are aligned with the standing Commission direction, which does not support development of these separate standards. Staff should continue to monitor international developments in this regard and keep the Commission informed. The second issue of concern to me is the ICRP concept of the regulatory codification of "constraints" (which I understand to be regulatory setpoints below the actual regulatory exposure limits, but still invoking some set of regulatory requirements/responses). Staff seems to indicate a preliminary support for this concept in Enclosure 2 to the SECY paper, which states "the staff believes that the addition of a requirement for licensees to establish and use a dose constraint could be an appropriate change . . . that would assist licensees in achieving occupational doses that are ALARA." While I understand that licensees voluntarily develop and implement internal constraints, the regulatory imposition of these constraints strikes me as an overreaching insertion of regulatory standards into the licensee's management of its radiation protection program – a step I could not support on the basis of the thin rationale provided in this paper.

Finally, I draw attention to the important fact that the staff continues to find that current regulations provide adequate protection of public health and safety. The Advisory Committee on Reactor Safeguards concurs in this position. [Letter dated 18 February 2009, M. Bonaca to D. Klein] It is in no way inconsistent, however, that staff continue its participation in the technical committees of the ICRP, the National Council on Radiation Protection and Measurements, the United Nations Scientific Committee on the Effects of Atomic Radiation, the U.S. Department of Energy's Low Dose Radiation Research Program, and similar international scientific bodies. Participation in these efforts and the evaluation of alignment with ICRP

Publication 103: 1) will inform us where changes to our regulations may be merited; 2) will help establish a technical basis for instances where exceptions to ICRP Publication 103 continue to be appropriate; and, 3) will result in continued high assurance that our regulatory framework for radiation protection is sound.



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Kristine L. Svinicki

03/4/09