

April 2, 2009

MEMORANDUM TO: R. W. Borchardt  
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA/**

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

The Commission has approved 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, as appropriate and where scientifically justified, to achieve greater alignment with the 2007 recommendations of the International Commission on Radiological Protection (ICRP) contained in ICRP Publication 103.

The Commission agrees with the staff and the Advisory Committee on Reactor Safeguards (ACRS) that the current NRC regulatory framework continues to provide adequate protection of the health and safety of workers, the public, and the environment. 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. For example, while licensees voluntarily develop and implement internal constraints, the regulatory imposition of these constraints is an overreaching insertion of regulatory standards into the licensee's management of its radiation protection program.

The Commission agrees 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. The staff should continue to monitor international developments in this regard and keep the Commission informed.

The Commission is concerned about the potential impact of effectively lowering the occupational dose limit to 2 rem (20 mSv) per year. 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.

Based on the extent and complexity of the stakeholder comments received, the staff should either 1) provide the Commission with a proposed rule once the technical basis has been developed or 2) provide a paper to the Commission outlining any substantive policy issues identified and options for their resolution prior to developing a proposed rule.

The staff should 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.

cc: Chairman Klein  
Commissioner Jaczko  
Commissioner Lyons  
Commissioner Svinicki  
OGC  
CFO  
OCA  
OPA  
Office Directors, Regions, ACRS, ASLBP (via E-Mail)  
PDR