

Summary of Stakeholder Interactions

Background:

In the Staff Requirements Memorandum (SRM) for SECY-08-0197, dated April 2, 2009, the Commission approved the staff recommendation to begin engagement with stakeholders and interested parties to initiate development of the regulatory basis (previously referred to as technical basis) for possible revision of the Nuclear Regulatory Commission's (NRC's) radiation protection regulations, as appropriate and where scientifically justified, to achieve greater alignment with the 2007 International Commission on Radiological Protection (ICRP) recommendations. The Commission also directed that the staff continue its participation in various national and international forums, recognizing that these efforts and the evaluation of alignment with ICRP Publication 103: 1) will inform the staff where changes to the NRC's regulations may be merited; 2) will help establish a regulatory 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.

In response to this SRM-SECY-08-0197, the NRC staff has engaged a wide range of stakeholders on a set of significant technical issues related to increasing alignment with international recommendations, standards and the radiation protection framework. The set of issues was guided by the staff presentation in SECY-08-0197. The issue topics discussed included use of new methodology and terminology, occupational total effective dose, the occupational dose limit for the embryo/fetus of a declared pregnant female, and As Low As Reasonably Achievable (ALARA) planning. The issue of limits for the lens of the eye was added following the publication of the statement by the ICRP in April 2011. Additional topics were raised during the discussions, including use of the International System of units and reporting requirements for occupational exposure.

Three *Federal Register* Notices have been issued, soliciting feedback and comments (74 FR 32198, July 7, 2009; 75 FR 59160, September 27, 2010; and 76 FR 53847, August 30, 2011). Presentations and discussion have taken place with a variety of professional societies, licensee organizations, public interest groups, and the States. A total of 59 comments were received from these formal requests, and are publicly available. In the fall of 2010, a series of facilitated round table workshops were held in Washington, D.C., Los Angeles, California, and Houston, Texas.

This summary is divided into three sections:

- I. Professional Societies and Organizational Meetings
- II. Advisory Committees
- III. Facilitated Round Table Workshops

Enclosure 3 provides the summary of stakeholder views for each of the technical issues.

I. Professional Societies and Organizational Meetings

The NRC staff has actively engaged various organizations and professional societies to discuss the issues and options. The following list of 24 meetings illustrates the wide range of stakeholder types that have had discussions with the staff.

June, 2009, 28th International Dosimetry and Records User's Symposium, San Diego, CA. Radiation protection and dosimetry representatives from a variety of licensee types, specifically including nuclear power.

June, 2009, 56th Annual Meeting of Society of Nuclear Medicine, Toronto, Canada. Medical professionals, particularly those involved in nuclear medicine.

June, 2009, Fuel Cycle Information Exchange, Bethesda, MD. Licensee representatives of fuel facilities licensees.

July, 2009, 54th Annual Health Physics Society Meeting, Minneapolis, MN. Radiation protection representatives from a wide variety of licensee types, national laboratories, and international organizations.

August, 2009, The 2009 National State Liaison Officers Conference (SLO), Rockville, MD. Governor-appointed SLOs.

October, 2009, American Society of Nuclear Cardiology, Minneapolis, MN. Medical professionals in the area of nuclear cardiology.

November, 2009, National Aeronautics and Space Administration (NASA) Health Physics Group, Teleconference. Radiation protection staff from NASA program centers.

January, 2010, 2010 Information System on Occupational Exposure (ISOE) North American ALARA Symposium/EPRI Radiation Protection Conference, Ft. Lauderdale, FL. Representatives of national and international power reactor organizations.

February, 2010, Institute for Energy and Environmental Research, Silver Spring, MD. Representatives of environmental non-government organizations.

March, 2010, Regulatory Information Conference, North Bethesda, MD. Representatives from a variety of licensee types and national and international organizations.

April, 2010, Conference of Radiation Control Program Directors, Newport, RI. Representatives of state radiation control programs, including both Agreement and non-Agreement States.

June, 2010, Fuel Cycle Information Exchange, Bethesda, MD. Licensee representatives of fuel facilities licensees.

July, 2010, American Association of Physicists in Medicine, Philadelphia, PA. Medical professionals, particularly those involved in nuclear medicine.

July, 2010, Nuclear Energy Institute (NEI) Health Physics Forum, Clearwater Beach, FL. Radiation protection representatives from domestic and some international nuclear power facilities.

September, 2010, 2010 Texas Radiation Regulatory Conference, Austin, TX. Representatives from a variety of industrial and medical licensees in the State of Texas.

January, 2011, ISOE ALARA Conference, Ft. Lauderdale, FL. Representatives of national and international power reactor organizations.

March, 2011, Regulatory Information Conference, North Bethesda, MD. Representatives from a variety of licensee types and national and international organizations.

April, 2011, 2011 Triennial NASA Health Physics Training Meeting, Washington, D.C. Radiation protection representatives for each of NASA's laboratories and centers.

June, 2011, 56th Health Physics Society Annual Meeting, West Palm Beach, FL. Radiation protection representatives from a wide variety of licensee types, national laboratories, and international organizations.

August, 2011, NEI Radiation Protection Forum, Seattle, WA. Radiation protection representatives from domestic and some international nuclear power facilities.

September, 2011, Child Health Corporation of America Radiology Directors Forum, Dallas, TX. Representatives from radiology programs in children's hospitals.

October, 2011, 2011 ICRP International Symposium, North Bethesda, MD. Representatives of national and international organizations.

January, 2012, ISOE International ALARA Conference, Ft. Lauderdale, FL. Representatives of national and international power reactor organizations.

March, 2012, Regulatory Information Conference, North Bethesda, MD. Representatives from a variety of licensee types and national and international organizations.

II. Advisory Committees (ACRS and ACMUI)

November 6, 2008, Advisory Committee on Reactor Safeguards. Rockville, MD

February 6, 2009, Advisory Committee on Reactor Safeguards, Rockville MD

May 7-8, 2009, Advisory Committee on the Medical Use of Isotopes, Rockville, MD

December 16, 2009, Advisory Committee on Reactor Safeguards, Rockville, MD

April 27, 2012, Advisory Committee on Reactor Safeguards, Rockville, MD (Scheduled)

III. Facilitated Round Table Workshops

Each of the facilitated round table workshops included representatives from a broad range of users of radioactive material. In addition, each workshop provided a more focused opportunity for certain segments of stakeholders to have a more complete representation in the discussion. The workshop in Washington, D.C. included a focus on the nuclear power industry, and other Federal agencies. The Los Angeles workshop included a focus on medical uses of radiation, and the Houston workshop included a focus on industrial uses. These workshops effectively provided a broad spectrum of stakeholders the opportunity to discuss the various technical issues with each other, and with the NRC staff. Transcripts of each workshop, and all of the written comments received in response to the *Federal Register* Notices, are publicly available.

Washington DC/Silver Spring:

October 25, 2010 - October 27, 2010. Changes to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20 discussed on October 25th and 26th. Changes to 10 CFR Part 50 Appendix I discussed on October 27th.

Participant Organizations/Agencies:

- Exelon Nuclear
- U. S. Department of Energy
- Organization of Agreement States, Inc (OAS)
- United States Enrichment Facility (Paducah, KY)
- Canadian Nuclear Safety Commission
- Troxler Electronic Laboratories
- Environmental Protection Agency
- National Institute of Health (NIH)
- QSA Global / International Source Suppliers and Producers Association
- Oak Ridge National Laboratory/Battelle
- Conference of Radiation Control Program Directors (CRCPD)
- Kettering Medical Center (OH)
- Duke Energy
- American College of Radiology
- Johns Hopkins Hospital
- Energy Solutions
- NEI
- American Portable Nuclear Gauge Association
- Southern Nuclear Company
- Dominion Resources
- Society of Nuclear Medicine
- Triad Isotopes, Inc.
- S.M. Stoller Corporation

Los Angeles, California:

November 3, 2010- November 4, 2010

Participant Organizations/Agencies:

- NEI
- University of California Los Angeles Medical Center
- AREVA
- Valley Industrial X-Ray and Inspection Services
- Southern California Edison
- University of California Los Angeles
- American Association of Physicists in Medicine
- Children's Hospital Los Angeles
- CRCPD
- California Department of Public Health
- University of Southern California Medical Center
- Los Angeles County Department of Public Health
- Hoag Memorial Hospital Presbyterian
- Therapy Physics, Inc.
- American College of Radiology
- Perkin Elmer / Council on Radionuclides and Radiopharmaceuticals
- City of Hope Medical Center
- Veterans Affairs Medical Center

Houston, Texas:

November 8, 2010 - November 9, 2010.

Participant Organizations/Agencies:

- Acuren Inspection (Houston)
- Baker Hughes (Lafayette, Louisiana)
- Baylor College of Medicine (Houston, Texas)
- Energy Solutions (Salt Lake City)
- Lamco and Associates
- H&H X-Ray Services
- NEI
- Radiation Technology, Inc. (Austin)
- Metco
- Louisiana State University
- OAS / Louisiana Department of Environmental Quality
- CRCPD / Texas Department of State health Services
- M.D. Anderson Cancer Center (Houston, Texas)
- South Texas Project Operating Company
- Stark Test (Houston, Texas)
- TC Inspection
- International Isotopes
- Society of Nuclear Medicine