

Office of Federal and State Materials and Environmental Management Programs

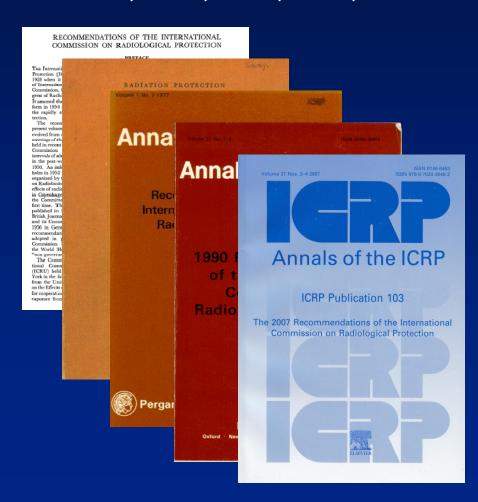
Safety and Security in the Beneficial Applications of Nuclear Materials

Options to Revise Radiation Protection Regulations

2011 ISOE North American ALARA Symposium EPRI Radiation Protection Conference January 10, 2011

History

- International Commission on Radiological Protection (ICRP) Recommendations
 - Earlier recommendations: 1928, 1934, 1937, 1950, 1954
 - 1959 Publication 2
 - 1977 Publication 26
 - 1990 Publication 60
 - 2007 Publication 103





Background

- ICRP revised recommendations in late 2007
- NRC staff analysis indicated areas warranting consideration for revisions
- Commission approved staff recommendation to engage stakeholders and initiate development of technical basis materials on April 2, 2009





Outreach Activities

- Phase I of outreach included:
 - Presentations to numerous organizations and groups
 - FRN published inviting inputs (72 FR 32198)
 - Dedicated web address for comments <u>Regs4RP@nrc.gov</u>
- Phase II Workshops
 - FRN published with issues and questions (75 FR 59160)
 - Workshops in Washington, Los Angeles, and Houston
 - Comments accepted through January 31, 2011





Issues

- Effective Dose and Numerical Values
- Occupational Dose Limits
- Dose Limits for Special Populations
- ALARA planning











What Did We Hear?

- Participants from the wide diversity of NRC licensed activities
- Active participation
- Common themes in each workshop



TED and Numerical Values

- General support for updating numerical values and scientific base
- Mixed views on terminology
- Many suggested delaying rulemaking until ICRP completes work on dose coefficients
- Some discussion of moving from Regulation to Guidance





Occupational Dose Limits

- ICRP Recommendation is 10 rem over 5 years, with a maximum of 5 rem in any one year
- Part 20 limit is 5 rem per year
- Little support for change to regulation
 - Certain groups of licensees continue to have individuals above 20 mSv/yr (2 rem)
 - Standard of Care needs to remain as is
 - ALARA has resulted in achieving desired dose reductions
 - Many do not believe changes in risk justify change to limit





Special Populations

- Dose Limits for Embryo/Fetus (Occupational)
 - Mixed feedback
 - Current limit does not seem to pose issues for many licensees
 - Options don't seem to change level of protection
 - Change could challenge detection capabilities
- Public Exposure
 - Alternative dose provisions have not been used
 - Patient Release needs to remain unchanged

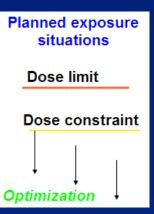




ALARA Planning

- Most licensees do planning to reduce exposures and use a variety of criteria to trigger actions
- Little support for using the term "constraint"
- Many concerned that any numerical values in regulations will be a de facto limit
- Some support for explicitly requiring planning, but with reservations of what inspectors would be expecting in licensing programs





Future Plans

- Phase III Validation of information received,
 Spring 2011
- Staff recommendations to Commission Fall 2011
- Development of Technical Basis to support Commission decisions





What Is the Staff Going to Recommend?

- "Too soon to tell"
- You still have the opportunity to give us:
 - Positions
 - Rationale
 - Arguments





Let Us Know

Web pages

http://www.nrc.gov/aboutnrc/regulatory/rulemaking/opt-revise.html

Email Address: <u>regs4rp@nrc.gov</u>



