

Regulatory Guide Periodic Review

Regulatory Guide Number: **8.19**

Title: **Occupational Radiation Dose Assessment in Light-Water Reactor Power Plants -- Design Stage Man-Rem Estimates**

Office/Division/Branch: **RES/DSA/RPB**

Technical Lead: **Casper Sun**

Recommended Staff Action: **Revise**

1. What are the known technical or regulatory issues with the current version of the Regulatory Guide(RG)?

Regulatory Guide 8.19, Revision 1, "Occupational Radiation Dose Assessment in Light-Water Reactor Power Plants -- Design Stage Man-Rem Estimates," issued in June 1979, describes a method acceptable to the NRC staff for performing an assessment of collective occupational radiation dose to meet the requirements for the "As Low as is Reasonably Achievable" program in 10 CFR part 20, "Standards for Protection against Radiation," and in 10 CFR part 50.34, "Contents of Applications; Technical Information." The information contained in the guide is still consistent with 10 CFR 20, 10 CFR 50.34 and RG 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)," which is referenced in the guide. However, minor editorial changes are needed in the reference section and the term "man-rem" needs to be changed to "person-rem." Since these changes are administrative in nature, there is no need for an immediate revision of the guide.

2. What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?

There is not an impact because there are no significant technical issues.

3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contractor resources?

The estimated level of effort is about 0.1 which includes coordination with program offices and internal process. Contractor support is not needed.

4. Based on the answers to the questions above, what is the staff action for this guide (Reviewed with no issues identified, Reviewed with issues identified for future consideration, Revise, or Withdraw)?

Revise.

5. Provide a conceptual plan and timeframe to address the issues identified during the review.

There is no need to update the RG immediately. The staff plans to develop a final version of this draft guide by the third quarter of FY15, and issue it for public comment by the fourth quarter of FY15.

References

1. RG 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)." NRC, Washington, DC.¹
2. Federal Register no. 40244: Vol. 74, No. 153/Tuesday, August 11, 2009/Notices: The Nuclear Regulatory Commission (NRC) is withdrawing Regulatory Guide (RG) 1.16, "Reporting of Operating Information-Appendix A Technical Specifications." Revision 4 of the Regulatory Guide was issued for comment in August 1975 and never finalized. (ML13066A529).
3. NUREG-1530, "Reassessment of NRC's Dollar Per Person-Rem Conversion Factor Policy." NRC, Washington, DC.

NOTE: This review was conducted in August 2014 and reflects the staff's plans as of that date. These plans are tentative and subject to change.

¹ Publicly available NRC-published documents are available online through the NRC Library on the NRC's public Web site at <http://www.nrc.gov/reading-rm/doc-collections/>. The documents can also be viewed online or printed for a fee in the NRC's Public Document Room (PDR) at 11555 Rockville Pike, Rockville, MD; the mailing address is USNRC PDR, Washington, DC 20555; telephone 301-415-4737 or (800) 397-4209; fax (301) 415-3548; and e-mail pdr.resource@nrc.gov.