

## Regulatory Guide Periodic Review

**Regulatory Guide Number:** 8.19, Revision 1

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

**Office/Division/Branch:** NRO/DSEA/RPAC  
**Technical Lead:** Ed Stutzcage

**Staff Action Decided:** Revise

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

RG 8.19 was issued in 1979 to describe 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."

RG 8.19 is still consistent with the requirements in 10 CFR Part 20, 10 CFR Part 50.34, and RG 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)." Some of the references in the guide are outdated. In addition, references to some regulations and guidance documents need to be updated to account for 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." In particular, the term "man-rem" should be changed to the revised term "person-rem."

However, these changes are administrative in nature and do not affect the technical content of the guide or what is expected from licensees or applicants in performing design stage dose estimates.

**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?**

Although no licensing actions are anticipated over the next several years, revision of this RG will assist current licensees if they choose to develop procedures for their facility for occupational radiation dose assessment.

**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?**

An estimate of the effort needed to revise this RG is between 0.1 FTE and 0.15 FTE. No contractor support is anticipated.

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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.**

The staff plans to develop a draft guide that will be submitted to the Office of Nuclear Regulatory Research by the third quarter of FY20 and to issue it for public comment by the fourth quarter of FY20.

**NOTE: This review was conducted in June 2018 and reflects the staff's plans as of that date. These plans are tentative and subject to change.**