

## Regulatory Guide Periodic Review

**Regulatory Guide Number:** 8.13, Revision 3

**Title:** Instruction Concerning Prenatal Radiation Exposure

**Office/division/branch:** RES/DSA/RPB  
**Technical Lead:** Vered Shaffer

**Recommended Staff Action:** Reviewed with issues identified for future consideration

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

RG 8.13 was issued in June 1999 to comply with the regulations in 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations." RG 8.13 provides information to pregnant women, and other personnel, to help them make decisions regarding radiation exposure during pregnancy. This RG also supplements RG 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure," which contains a broad discussion of the risks from exposure to ionizing radiation.

The citations to regulations described in RG 8.13 are consistent with those listed in 10 CFR Part 20, "Standards for Protection Against Radiation." However, the technical information in RG 8.13, along with RG 8.29, regarding embryo/fetal radiation risk and the technical references which provide this information, is not current. Additional information related to the guidance in RG 8.13 has been published since 1999 by the United Nations Scientific Committee on the Effects of Atomic Radiation, the U.S. National Academies, the International Commission on Radiological Protection, the National Council on Radiation Protection and Measurements, and the Oak Ridge Associated Universities. These reference materials provide additional information on radiation exposures to the embryo fetus as well as radiation exposures and stochastic and deterministic effects (noncancerous diseases and ocular effects) in occupational workers and members of the public. The staff plans to incorporate these changes in the next revision for RG 8.29 and these changes do not affect the implementation of this RG.

**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 no impact on licensing and inspection activities since this RG is consistent with current NRC regulatory requirements. In addition, licensees generally voluntarily use the updated information without licensing actions.

**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 correct the identified issues is about 0.1 FTE and 0.2 FTE.

## Regulatory Guide Periodic Review

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)?**

Reviewed with issues identified for future consideration.

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

The staff will consider the new available references and any other technical information that may need to be updated during the next periodic review of the guide.

**NOTE: This review was conducted in April 2017 and reflects the staff's plans as of that date. These plans are tentative and subject to change.**