

REGULATORY ANALYSIS

DRAFT REGULATORY GUIDE DG-2004 EMERGENCY PLANNING FOR RESEARCH AND TEST REACTORS AND OTHER NON-POWER PRODUCTION AND UTILIZATION FACILITIES

(Proposed Revision 2 of Regulatory Guide 2.6, dated March 1983)

1. Statement of the Problem

The U.S. Nuclear Regulatory Commission's (NRC) regulations require research and test reactors, and other non-power production and utilization facility licensees and applicants, to develop plans for coping with emergencies. Specific guidance is needed to provide acceptance criteria for complying with the applicable requirements set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.34, "Contents of Applications: Technical Information," 10 CFR 50.54, "Conditions of Licenses," and Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities."

The current version of RG 2.6 (Revision 1) endorses the use of American National Standards Institute (ANSI)/American Nuclear Society (ANS) standard ANSI/ANS-15.16-1982, "Emergency Planning for Research Reactors." This consensus standard was updated to ANSI/ANS-15.16-2015, "Emergency Planning for Research Reactors," in 2015.

2. Objective

The objective of this regulatory action is to assess the need to update NRC guidance and provide applicants with a method to demonstrate compliance with the 10 CFR Part 50 requirements for developing and maintaining emergency plans for non-power production and utilization facilities.

3. Alternative Approaches

The NRC staff considered the following alternative approaches:

1. Do not revise RG 2.6.
2. Withdraw RG 2.6
3. Revise RG 2.6 to address the current methods and procedures.

3.1 Alternative 1: Do Not Revise RG 2.6

Under this alternative, the NRC would not revise RG 2.6, and the current guidance would be retained despite improvements that are available to licensees. This alternative is considered the "no-action" alternative and provides a baseline condition from which any other alternatives will be assessed. If the NRC does not take action, licensees that want to use the guidance provided in ANSI/ANS 15.16-2015 for updating their emergency plans could do so.

3.2 Alternative 2: Withdraw RG 2.6

Under this alternative the NRC would withdraw this RG. This action would eliminate the only readily available description of the methods the NRC staff considers acceptable for demonstrating compliance with the applicable regulations. Although this alternative would be less costly than the preferred alternative, it would impede the public's accessibility to the most current regulatory guidance. This alternative would also increase the costs of NRC reviews because the NRC would need to review each submittal individually.

3.3 Alternative 3: Revise RG 2.6

Under this alternative, the NRC would revise RG 2.6, taking into consideration the availability of the most current national consensus standard. Licensees, applicants, and the NRC staff would be using the same version of the standard for guidance, thus enhancing their ability to communicate with one another in a clear and efficient manner.

The impact to the NRC would be the costs associated with preparing and issuing the RG revision. The impact to the public would be the voluntary costs associated with reviewing and providing comments to the NRC during the public comment period. The value to NRC staff and license applicants would be the benefits associated with enhanced efficiency and effectiveness in using a common guidance document as the technical basis for license applications and other interactions between the NRC and its regulated entities.

Revising this RG to adopt, in whole or in part, a consensus standard is consistent with the NRC policy of evaluating the latest versions of national consensus standards to determine their suitability for endorsement by RGs. This approach also complies with the NRC's Management Directive (MD) 6.5, "NRC Participation in the Development and Use of Consensus Standards" (ML16193A497) and is in accordance with Public Law 104-113, "National Technology Transfer and Advancement Act of 1995."

4. Conclusion

Based on this regulatory analysis, the NRC staff concludes that revision of RG 2.6 is warranted. The proposed revision would provide licensees and applicants with a method that the NRC staff considers acceptable for use in complying with the regulations on the content of emergency plans for research and test reactors and other non-power production and utilization facilities licensed under 10 CFR Part 50, including facilities dedicated to the production of medical radioisotopes, such as molybdenum-99. The action could also lead to cost savings for the industry, especially with regard to applicants' and licensees' ability to provide acceptable emergency plans for NRC staff review, and potentially avoiding requests for additional information.