REGULATORY ANALYSIS

DRAFT REGULATORY GUIDE (DG)-1391
PERFORMANCE-BASED CONTAINMENT LEAK-TEST PROGRAM

(Proposed Revision 1 of Regulatory Guide (RG) 1.163, November 2022)

1. Statement of the Problem

The U.S. Nuclear Regulatory Commission (NRC) published Revision 0 of Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," in September 1995 to provide licensees and applicants with agency-approved guidance for complying with the performance-based Option B in Appendix J to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50. The current version of Regulatory Guide 1.163 (Revision 0) does not reference the industry's most recent guidance and does not reflect the NRC's current regulatory positions.

The NRC is considering revising Regulatory Guide 1.163 to address new guidance for implementing Option B "Performance-Based Requirements" of Appendix J of 10 CFR Part 50. Licensees still using Revision 0 may continue to do so. However, for those licensee's choosing to use more recent industry guidance documents and extend testing intervals further, a confusing arrangement exists. This presents a regulatory issue as it detracts from providing efficient licensing reviews.

2. Objective

The objective of this regulatory action is to update NRC guidance for licensees and applicants regarding an acceptable method to demonstrate compliance with Option B in Appendix J to 10 CFR Part 50 requirements for extending Type A tests intervals up to 15 years and Type C test intervals up to 75 months by consolidating the staff's regulatory positions into one guidance document.

3. Alternative Approaches

The NRC staff considered the following alternative approaches:

1. Do not revise Regulatory Guide 1.163.

2. Withdraw RG 1.163.

3. Revise Regulatory Guide 1.163 to address the current methods and procedures.

Alternative 1: Do Not Revise Regulatory Guide 1.163

Under this alternative, the NRC would not revise [or issue additional] guidance, and the current guidance would be retained. If NRC takes no action, there would not be any changes in costs or benefit to the public, licensees, or NRC. This alternative is considered the "no-action" alternative and provides a baseline condition from which any other alternatives will be assessed. However, the "no-action" alternative would not address identified concerns with the current version of the regulatory guide. The NRC would continue to review each application on a case-by-case basis.

Alternative 2: Withdraw RG 1.163

Under this alternative, the NRC would withdraw this RG. This would eliminate the problems identified above with the RG. However, it would also eliminate the only readily available description of the methods the NRC staff considers acceptable for demonstrating compliance with Appendix J of 10 CFR Part 50 within the scope of RG 1.163. Although this alternative would be less costly than the recommended alternative, removing this guidance would increase the burden for the NRC, applicants, and licensees by increasing the likelihood that the NRC would need to issue requests for additional information related to the scope of RG 1.163.

Alternative 3: Revise Regulatory Guide 1.163

Under this alternative, the NRC would revise Regulatory Guide 1.163. This revision would incorporate the latest information on an acceptable performance-based leak-test program, supporting guidance, and review practices. By doing so, the NRC would ensure that the guidance in the RG available in this area is current, and accurately reflects the staff's position.

The impact to the NRC would be the costs associated with preparing and issuing the revision to the regulatory guide. 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 its applicants would be the benefits associated with enhanced efficiency and effectiveness in using a common guidance document as the technical basis for license amendment requests and other interactions between the NRC and its regulated entities.

Conclusion

Based on this regulatory analysis, the NRC staff concludes that a revision of Regulatory Guide 1.163 is warranted. The action will enhance regulatory process efficiency by reducing the processing time of the associated license amendment requests. It could also lead to cost savings for the industry, especially with regard to more efficient reviews by ensuring the desired information is exchanged and the appropriate technical specification wording is incorporated.