

REGULATORY ANALYSIS

DRAFT REGULATORY GUIDE DG-1271 DECOMMISSIONING OF NUCLEAR POWER REACTORS *(Proposed Revision 1 of Regulatory Guide 1.184 dated July 2000)*

Statement of the Problem

Since issuance of RG 1.184 in July 2000 there have been 11 years of regulatory experience with decommissioning of nuclear facilities as well as the release of guidance relating to decommissioning of power reactors. Some of the insights and guidance are found in the references listed below. The Regulatory Guide in its current form does not contain all of the regulatory requirements and related guidance on decommissioning nuclear power reactors.

Objective

The objective of this regulatory action is to provide updated guidance on decommissioning nuclear power reactors that NRC developed in the decade since Regulatory Guide 1.184 was issued.

Alternative Approaches

The NRC staff considered the following alternative approaches:

- Do not revise Regulatory Guide 1.184.
- Revise Regulatory Guide 1.184.

Alternative 1: Do Not Revise Regulatory Guide 1.184

Under this alternative, the NRC would not revise or issue additional guidance, and the current guidance would be retained. If NRC does not take action, there would not be any changes in costs or benefit to the public, licensees or NRC. 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. This alternative provides a baseline condition from which any other alternatives will be assessed.

Alternative 2: Revise Regulatory Guide 1.184

Under this alternative, the NRC would revise Regulatory Guide 1.184, taking into consideration the factors that have changed since the original issuance of the guide. The benefit of this action is that it would facilitate the decommissioning process by providing general procedures that the NRC considers acceptable for resolving issues related to decommissioning and eventual license termination for nuclear power reactors. The impact to the NRC would be the costs associated with preparing and issuing the regulatory guide revision. The impact to the public would be the voluntary costs associated with reviewing and providing comments to 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 termination and other interactions between the NRC and its regulated entities.

References

1. U.S. Nuclear Regulatory Commission, "Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities," NUREG-0586, Supplement 1, November 2002, ADAMS Accession Number ML023500410.
2. U.S. Nuclear Regulatory Commission, "Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans," NUREG-1700, Revision 1, April 2003, ADAMS Accession Number ML03120391.
3. U.S. Nuclear Regulatory Commission, "Standard Format and Content of License Termination Plans for Nuclear Power Reactors," Regulatory Guide 1.179, June 2011, ADAMS Accession Number ML110490419.
4. U.S. Nuclear Regulatory Commission, "Fire Protection Program for Nuclear Power Plants During Decommissioning and Permanent Shutdown," Regulatory Guide 1.191, May 2001, ADAMS Accession Number ML011500010.
5. U.S. Nuclear Regulatory Commission, "Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors," NUREG-1713, December 2004, ADAMS Accession Number ML043510113.