

# REGULATORY ANALYSIS

## DRAFT REGULATORY GUIDE DG-1279 CONTROL OF FERRITE CONTENT IN STAINLESS STEEL WELD METAL (Proposed Revision 4 of Regulatory Guide 1.31, dated April 1978)

### Statement of the Problem

The U.S. Nuclear Regulatory Commission (NRC) issued Revision 3 to Regulatory Guide 1.31, “Control of Ferrite Content in Stainless Steel Weld Metal,” in April 1978. The guidance does not reflect changes in the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) and American Welding Society (AWS) specifications since 1978. Therefore, revision of this regulatory guidance is necessary to reflect updates in relevant specifications.

### Objective

The objective of this regulatory action is to update the NRC’s guidance for the control of ferrite content in stainless steel weld metal consistent with changes in the ASME Code and AWS specifications since April 1978.

### Alternative Approaches

The NRC staff considered the following alternative approaches:

Do not revise Regulatory Guide 1.31.

Revise Regulatory Guide 1.31.

#### Alternative 1: Do Not Revise Regulatory Guide 1.31

Under this alternative, the NRC would not revise the guidance, and the current guidance would be retained. If the NRC does not take action, there would not be any changes in costs or benefit to the public, licensees, or the 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 1.31

Under this alternative, the NRC would revise Regulatory Guide 1.31, taking into consideration the changes in the ASME Code and AWS specifications.

One benefit of this action is that it would clarify the guidance and references to the relevant standards and specifications for applicants that are building new nuclear power plants and for current licensees.

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 the NRC during the public comment period. The value to the 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 applications and other interactions between the NRC and its regulated entities.

## **Conclusion**

Based on this regulatory analysis, the NRC staff concludes that revision of Regulatory Guide 1.31 is warranted. The proposed action will reduce unnecessary confusion when referencing the ASME Code and AWS specifications.