

REGULATORY ANALYSIS

REGULATORY GUIDE 1.43, REVISION 1, “CONTROL OF STAINLESS STEEL WELD CLADDING OF LOW-ALLOY STEEL COMPONENTS.”

Statement of the Problem

The Nuclear Regulatory Commission (NRC) initially issued Regulatory Guide 1.43, “Control of Stainless Steel Weld Cladding of Low-Alloy Steel Components,” in May 1973. The guidance does not reflect changes in the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code since 1973. Therefore, revision of this regulatory guidance is necessary to reflect updates in the ASME Code.

Objective

The objective of this regulatory action is to update the NRC’s guidance for the control of stainless steel weld cladding of low-alloy steel components, consistent with changes in the ASME Code since May 1973.

Alternative Approaches

The NRC staff considered the following alternative approaches:

- Do not revise Regulatory Guide 1.43.
- Revise Regulatory Guide 1.43.

Alternative 1: Do Not Revise Regulatory Guide 1.43

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, the 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 1.43

Under this alternative, the NRC would revise Regulatory Guide 1.43, taking into consideration the changes in the ASME Code.

One benefit of this action is that it would clarify the guidance and references to the ASME Code for applicants building new nuclear power plants, as well as for 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 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 recommends revision of Regulatory Guide 1.43. The staff concludes that the proposed action will reduce unnecessary confusion when referencing the ASME Code. It could also lead to cost savings for the industry, especially with regard to applications for standard plant design certifications and combined licenses.