

**REGULATORY ANALYSIS**

**DRAFT REGULATORY GUIDE DG-1277**

**INITIAL TEST PROGRAM OF EMERGENCY CORE COOLING SYSTEMS**

**FOR BOILING-WATER REACTORS**

(New Regulatory Guide)

**Statement of the Problem**

The U.S. Nuclear Regulatory Commission (NRC) issued Draft Regulatory Guide (DG)-1277 to ensure that Boiling-Water Reactors (BWRs) licensed under the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, properly test emergency core cooling systems (ECCSs) before conducting normal operations in accordance with technical specifications. This new RG is necessary to address new BWR initial plant tests of design certification (DC) and combined license (COL) designs on using the requirements in 10 CFR Part 52. Some operating experience changes were also added to detect ECCS component failures before plant startup begins.

**Objective**

The objective of this new RG is to provide additional staff guidance to 10 CFR Part 52 applicants for the development of an acceptable initial test program (ITP).

**Alternative Approaches**

This RG was developed to achieve the objective outlined above and is consistent with current regulatory practice. 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 applications and other interactions between the NRC and its regulated entities.

**Conclusion**

The NRC should issue this RG to enhance the licensing process. The NRC staff concluded that the proposed action will reduce regulatory burden on both the NRC and its licensees and will result in an approved and more uniform process for implementing the ITP for ECCS systems in existing and new BWR designs. It could also lead to cost savings for the nuclear industry especially for standard plant DC and COL applications.

**Backfit Analysis**

Because this RG reflects current regulatory practice, it does not require a backfit analysis as described in 10 CFR 50.109(c).