

Regulatory Guide Periodic Review

Regulatory Guide Number: 1.35.1, Revision 0

Title: Determining Prestressing Forces for Inspection of Prestressed Concrete Containments

Office/division/branch: RES/DE/SGSEB
Technical Lead: Thomas Herrity

Staff Action Decided: Reviewed with issues identified for future consideration

1. What are the known technical or regulatory issues with the current version of the RG?

Regulatory Guide (RG) 1.35.1, "Determining Prestressing Forces for Inspection of Prestressed Concrete Containments," issued July 1990, provides guidance for determining prestressing forces for inspection of prestressed concrete containments. Based on the reported operational experience RG 1.35.1 works for calculating prestress force. Since the guide was issued in 1990, there have been additional studies by the industry on creep shrinkage fracture and containment prestress loss and a number of the references in it have been revised. As written the guidance is still valid, however, with the advancing knowledge and corresponding revision of the referenced codes and standards, there is need to determine if the revised codes and standards provide an acceptable method to satisfy the regulatory requirements.

2. What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities?

There is no near-term impact. For licensing activities, there are no new large power reactor license applications anticipated in the near future (next 3 to 5 years). Thus, there is no immediate need for revising the guide at this time to address their licensing. For small modular reactors at least one application is anticipated in the next two years.

3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contract dollars?

Revision of the RG will take at least 0.3 FTE of combined staff and contractor support. Contractor support is needed because of on-going staff commitments for the remainder of FY 2015.

4. Based on the answers to the questions above, what is the recommended staff action for this guide (Reviewed with no issues identified, Reviewed with issues identified for future consideration, Revise, or Withdraw)?

Reviewed with issues identified for future consideration. No changes recommended at this time.

5. **If a RG should be revised, provide a conceptual plan and timeframe to accomplish this.**

Not applicable.

NOTE: This review was conducted in January 2015 and reflects the staff's plans as of that date. These plans are tentative and subject to change.