



# NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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## NRC PROPOSES IMPROVEMENTS TO REACTOR VESSEL REQUIREMENTS

The Nuclear Regulatory Commission is proposing improvements to its rules regarding how pressurized water reactors (PWR) account for some effects of aging on their reactor vessels.

The proposal would increase the realism of calculations used to examine a PWR's susceptibility to a phenomenon known as pressurized thermal shock (PTS). PTS can occur under some scenarios that rapidly cool the reactor vessel while the vessel is pressurized. This would subject the steel to large thermal stresses, which could lead to cracking and even failure of the vessel. The other type of U.S. nuclear power plants, boiling water reactors, is not susceptible to PTS.

The proposed rule would allow PWR operators to voluntarily adopt a more realistic technical approach for determining the probability of vessel failure during a PTS event. This revised approach was derived using data from research on three currently operating PWRs that indicate the overall risk of PTS-induced vessel failure after 60 years of reactor operation is much lower than previously estimated. The proposed rule would also require PWR operators to perform detailed analysis on the results of regular reactor vessel inspections.

The proposed rule will be available on the NRC's Web site by entering ML070570283 at this address: <http://adamswebsearch.nrc.gov/dologin.htm>. Public comments on the proposed rule should be submitted within 75 days of the rule's publication, expected shortly, in the *Federal Register*. Comments received after that point will be considered if it is practical to do so. The comments should be addressed to the Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, Attention: Rulemakings and Adjudications Staff. Comments may also be faxed to the Secretary at 301-415-1101 or by e-mail to [SECY@nrc.gov](mailto:SECY@nrc.gov). Comments may also be submitted via the Federal eRulemaking Portal at <http://www.regulations.gov>. Please include the number RIN 3150-AI01 in the subject line of the comments.

For more information on the rule, contact NRC staff members George Tartal (telephone 301-415-0016, e-mail [gmt1@nrc.gov](mailto:gmt1@nrc.gov)) or Barry Elliot (telephone 301-415-2709, e-mail [bje@nrc.gov](mailto:bje@nrc.gov)).

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