

June 9, 2006

MEMORANDUM TO: James E. Dyer, Director
Office of Nuclear Reactor Regulation

FROM: Brian W. Sheron, Director */RA/*
Office of Nuclear Regulatory Research

SUBJECT: IMPENDING PUBLICATION OF TECHNICAL BASIS DOCUMENTS
SUPPORTING REVISION OF THE PRESSURIZED THERMAL SHOCK
RULE

For your information, the Office of Nuclear Regulatory Research (RES) will submit for publication in two weeks time the list of NUREG and NUREG/CR reports provided following this paragraph. These reports, along with other letter reports and memoranda, collectively form the technical basis for a revision to the pressurized thermal shock rule (10 CFR 50.61). The impetus for this research came from NRR User Need Request NRR-2002-025 (Item 4). These reports have been peer-reviewed by an independent expert panel and by a team of NRR staff (ADAMS ML052710370). In ADAMS ML052710370 your staff requested the enclosed reports, and other supporting documentation, be published expeditiously, thereby giving the public sufficient time to become familiar with this technology prior to the public comment period associated with rulemaking. Publishing these reports also satisfies a milestone in the current draft of the PTS rulemaking plan being prepared by your office.

NUREG-1806	EricksonKirk, M.T., et al., "Technical Basis for Revision of the Pressurized Thermal Shock (PTS) Screening Limit in the PTS Rule (10 CFR 50.61): Summary Report." <u>ADAMS ML061580318</u>
NUREG-1807	EricksonKirk, M.T., "Probabilistic Fracture Mechanics: Models, Parameters, and Uncertainty Treatment Used in FAVOR Version 04.1." <u>ADAMS ML061580343</u>
NUREG-1808	EricksonKirk, M.T., et al., "Sensitivity Studies of the Probabilistic Fracture Mechanics Model Used in FAVOR." <u>ADAMS ML061580349</u>
NUREG-1809	Bessette, D.E., "Thermal-Hydraulic Evaluations of Pressurized Thermal Shock" <u>ADAMS ML050390012</u>
NUREG-1795	Malik, S.N.M., "FAVOR Code Versions 2.4 and 3.1: Verification and Validation Summary Report." <u>ADAMS ML061580358</u>

- NUREG/CR-6731 Reyes, J.N., et al., "Scaling Analysis for the OSU APEX-CE Integral Test Facility"
ADAMS ML043570429
- NUREG/CR-6854 Williams, P.T., and T.L. Dickson, "Fracture Analysis of Vessels Oak Ridge, FAVOR v04.1: Computer Code: Theory and Implementation of Algorithms, Methods, and Correlations."
ADAMS ML061580369
- NUREG/CR-6855 Dickson, T.L., and P.T. Williams, "Fracture Analysis of Vessels Oak Ridge, FAVOR v04.1, Computer Code: User's Guide."
ADAMS ML061580375
- NUREG/CR-6856 Reyes, J.N., et al., "Final Report for the OSU APEX-CE Integral Test Facility"
ADAMS ML043570405
- NUREG/CR-6857 Fletcher, C.D., D.A. Prelewicz, and W.C., Arcieri, "RELAP5/MOD3.2.2 γ Assessment for Pressurized Thermal Shock Applications."
ADAMS ML043570394
- NUREG/CR-6858 Arcieri, W.C., R.M. Beaton, C.D. Fletcher, and D.E. Bessette, "RELAP5 Thermal-Hydraulic Analysis to Support PTS Evaluations for the Oconee-1, Beaver Valley-1, and Pallsades Nuclear Power Plants."
ADAMS ML043570385
- NUREG/CR-6859 Whitehead, D.L. and A.M. Kolaczowski, "PRA Procedures and Uncertainty for PTS Analysis."
ADAMS ML061580379

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NUREG/CR-6899 Chang, Y.H., K. Almenas, A. Mosleh, and M. Pour-Gol,
"Thermal-Hydraulic Uncertainty Analysis in Pressurized Thermal Shock
Risk Assessment: Methodology and Implementation on Oconee-1,
Beaver Valley, and Palisades Nuclear Power Plants."
ADAMS ML061100488

Please feel free to contact me or Dr. Mark EricksonKirk of my staff (at 301-415-6015 or mtk@nrc.gov) if you have any questions concerning the impending publication of these reports.

Enclosures:
As stated

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