

August 4, 2006

MEMORANDUM TO: Jennifer L. Uhle, Deputy Director
Materials Engineering
Division of Fuel, Engineering, and Radiological Research
Office of Nuclear Regulatory Research

THRU: Robert O. Hardies, Chief */RA/ Malik for*
Component Integrity Branch
Division of Fuel, Engineering, and Radiological Research
Office of Nuclear Regulatory Research

FROM: Mark Kirk, Senior Materials Engineer */RA/ Malik for*
Component Integrity Branch
Division of Fuel, Engineering, and Radiological Research
Office of Nuclear Regulatory Research

SUBJECT: NOTICE OF PUBLIC MEETING CONCERNING "REPORTS DETAILING
A TECHNICAL BASIS FOR A PROPOSED REVISION TO THE
PRESSURIZED THERMAL SHOCK RULE (10 CFR 50.61)"

DATE AND TIME: September 7-8, 2006
September 7: 8:30AM to 12:00PM T10-A1
1:00PM to 4:45PM T9-A1
September 8: 9:30AM to 3:45PM T9-A1

LOCATION: USNRC Headquarters
11545 Rockville Pike
Rockville, MD 20852

PURPOSE: The NRC has recently completed a series of reports that describe in detail the results of a project that was undertaken to develop a technical basis to support a risk-informed revision of the Pressurized Thermal Shock (PTS) rule (10 CFR 50.61). The information in these reports demonstrates that even through the period of license renewal, the likelihood of vessel failure attributable to PTS is extremely low (approximately 10^{-8} /year).

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These results provide evidence that the statutory embrittlement limit established in 10 CFR 50.61 can be modified significantly to reduce unnecessary conservatism without affecting safety. This is possible because the operating reactor fleet has little probability of exceeding the limits on the frequency of reactor vessel failure, as they relate to NRC guidelines on core damage frequency and large early release frequency during either the currently licensed lifetime or the period of license renewal.

These reports have been reviewed and discussed with the NRC's Advisory Committee on Reactor Safeguards (ACRS) during a series of public meetings. Following these meetings, the ACRS sent letters to the NRC expressing the view that the reports had developed a sound technical basis for a risk-informed revision of 10 CFR 50.61. Staff from the NRC's Office of Nuclear Reactor Regulation (NRR) have reviewed these reports and found them acceptable to begin the rulemaking process contingent upon successful resolution of certain outstanding technical issues.

In advance of the public comment phase on the revised PTS rule, the NRC is making these reports available to the public and is conducting a two-day workshop to familiarize interested members of the public with this information. While discussion at the workshop is welcomed and encouraged, the NRC is not soliciting formal written comments from the public at this time. The NRC will request public comments when a notice of proposed rulemaking is published in the *Federal Register*.

J. Uhle

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PARTICIPANTS: See enclosed agenda.

CATEGORY: This is a Category 3 meeting. The public is invited to participate in this meeting by providing comments and asking questions throughout the meeting.

Enclosure: Agenda

cc: See list

*Meetings between NRC technical staff and applicants or licensees are open for interested members of the public, petitioners, interveners, or other parties to attend pursuant to the Commission Policy Statement on "Staff Meetings Open to the Public: Final Policy Statement," 67 *Federal Register* 36920, May 28, 2002. Members of the public who wish to attend should contact Mark T. Kirk at (301)415-6015 or mtk@nrc.gov.

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<u>NAME</u>	M.T. Kirk Malik for	R. Hardies Malik for	M.T. Kirk	J. Uhle
<u>DATE</u>	08/ 01 /06	08/08/06	08/07/06	08/04/06

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DRAFT AGENDA
PUBLIC MEETING ON REPORTS DETAILING A TECHNICAL BASIS FOR A PROPOSED
REVISION TO THE PRESSURIZED THERMAL SHOCK RULE (10 CFR 50.61)

Thursday September 7, 2006
8:30 a.m. – 12:00 p.m., Room T10-A1, 1:00 p.m. – 4:45 p.m., Room T9-A1

Start Time	Stop Time	Duration [min]	Topic	Presenter / Moderator
8:30	9:00	30	Background of PTS Project (Overview, Objectives, Reviews Performed to Date)	Kirk
9:00	9:30	30	Status and Plan for Rulemaking	Mencinsky
9:30	9:45	15	Overview of Reports	Kirk
9:45	10:15	30	Questions from Public Regarding Reports and Regulatory Process	Hardies
10:15	10:30	30	Break	
10:30	11:00	30	Modeling Approach: Overview	Kirk
11:00	11:30	30	Modeling Approach: Risk Assessment and Human Factors	Kolaczowski
11:30	12:00	30	Modeling Approach: Thermal-Hydraulics	Besette
12:00	1:00	60	Lunch	
1:00	1:30	30	Modeling Approach: Fracture Mechanics and Material Embrittlement	Kirk
1:30	2:00	30	Questions from the Public Regarding Modeling Approach	Hardies
2:00	3:30	90	Summary of Results from Baseline Analysis of Three Plants	Kirk
3:30	3:45	15	Break	
3:45	4:45	60	Questions from Public Regarding Baseline Analysis	Hardies

Friday September 8, 2006
9:30 a.m. – 3:45 p.m., Room T9-A1

Start Time	Stop Time	Duration [min]	Topic	Presenter / Moderator
9:30	10:30	60	Summary of Study Generalizing the Results to All Domestic PWRs	Kirk
10:30	11:00	30	Questions from the Public Regarding Generalization	Hardies
11:00	11:30	30	Proposed Allowable Through-Wall Cracking Frequency Limit	Siu
11:30	11:45	15	Questions from the Public Regarding Through-Wall Cracking Frequency Limit	Hardies
11:45	1:00	75	Lunch	
1:00	1:30	30	Proposed Material Embrittlement-Based Reference Temperature Limits for Use in a Revised Version of 10 CFR 50.61	Kirk
1:30	2:00	30	Questions from Public Regarding Reference Temperature Limits	Hardies
2:00	3:00	60	General Questions from Public	Hardies
3:00	3:15	15	Break	
3:15	3:45	30	Summary	Hardies

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