

July 12, 2011

MEMORANDUM TO: Aladar A. Csontos, Chief
Component Integrity Branch
Division of Engineering
Office of Nuclear Regulatory Research

FROM: Gary L. Stevens, Senior Materials Engineer */RA/*
Component Integrity Branch
Division of Engineering
Office of Nuclear Regulatory Research

SUBJECT: PUBLIC MEETING – DISCUSSION OF REACTOR PRESSURE VESSEL
INTEGRITY ISSUES FOR OPERATING NUCLEAR POWER PLANTS

DATE & TIME: Tuesday, July 26, 2011
9:00 AM – 4:00 PM

LOCATION: U.S. Nuclear Regulatory Commission
One White Flint North, 16th Floor, Room B04
11555 Rockville Pike
Rockville, MD 20852-2738

PURPOSE: The U.S. Nuclear Regulatory Commission (NRC) staff is performing additional research on reactor pressure vessel (RPV) integrity issues, and is soliciting relevant input from interested parties on this subject. The purpose of this meeting is to have technical discussions related to the evaluation of irradiation effects on RPV ferritic materials for operating plants.

Safe operation of a nuclear power plant requires maintaining the structural integrity of the RPV during both routine operations (i.e., heatup, cooldown, and leak test) and during postulated accident scenarios (e.g., pressurized thermal shock (PTS)). Assessments of structural integrity require estimates of the fracture toughness of the RPV materials, including the adverse effects of neutron radiation, and comparison of this toughness with the driving force created by the stresses imposed on the RPV. The regulatory and guidance document that ensures RPV structural integrity that will be discussed in this meeting is Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.61a, "Alternate Fracture Toughness Requirements for Protection against Pressurized Thermal Shock Events."

The NRC's research efforts on RPV integrity relate to several of these documents. This meeting will include technical discussions related to these research activities, with particular focus on 10 CFR 50.61a and the NRC's Embrittlement Database.

MEETING CONTACT: Gary L. Stevens, RES/DE/CIB
301-251-7569
gary.stevens@nrc.gov

TELECONFERENCE: Please contact the NRC staff member listed above for teleconference information.

CATEGORY 2: This is a Category 2 Public Meeting. The NRC will obtain feedback from interested technical parties on RPV integrity issues for operating reactors. There will be no licensee-specific discussions of regulatory issues. The public is invited to discuss relevant issues with the staff at a designated point on the agenda.

PARTICIPANTS: Scheduled participants from the NRC include personnel from the Office of Nuclear Reactor Regulation (NRR), Office of New Reactors (NRO), and the Office of Nuclear Regulatory Research (RES).

NRC

Aladar A. Csontos (RES)	Matthew A. Mitchell (NRR)
Gary L. Stevens (RES)	Allen L. Hiser (NRR)
Mark T. Kirk (RES)	Robert O. Hardies (NRR)
Robert L. Tregoning (RES)	Carolyn Fairbanks (NRR)
Neil K. Ray (NRO)	

Industry and Public

Various representatives of the industry, both from EPRI and from utilities, are expected to attend.

Enclosure:
Meeting Agenda

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Enclosure:
Meeting Agenda

DISTRIBUTION:

A. Hiser, NRR	M. Galloway, NRR	B. Holian, NRR	A. McMurtray, NRR
M. Evans, NRR	J. Lubinski, NRR	M. Mitchell, NRR	C. Fairbanks, NRR
R. Hardies, NRR	S. Richards, RES	R. Tregoning, RES	M. Kirk, RES
N. Ray, NRO	D. Terao, NRO	J. Dixon-Herrity, NRO	T. Bergman, NRO

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OFFICE	RES/DE/CIB	RES/DE/CIB	RES/DE
NAME	G. Stevens	A. Csontos	M. Case
DATE	7/12/11	7/12/11	7/12/11

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DRAFT AGENDA

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Agenda:

Time	Topic*	Organization	Coordinator or Presenter
8:30	Welcome and Introduction	NRC/EPRI	Stevens
8:45	NRC Research Update on Regulatory Guide Development for Alternative PTS Implementation Guidance	NRC RES	Stevens
9:15	Industry Perspective on Issues or Uncertainties with Implementing the Revised PTS Rule	EPRI	Dingler/Hardin
9:45	Method(s) to Predict Shift and Estimate RT_{MAX-X} When Surveillance Data Deviate from the Generic Embrittlement Trend Curve Model	Industry/NRC	Palm/Mitchell
10:15	BREAK		
10:30	Options for Adjusting ΔT_{30} Values Using Plant-Specific Surveillance Data; use of Sister Plant Data	Industry/NRC	Griesbach/Mitchell
11:00	Discussion of NDE Issues Relative to Alternative Rule PTS Implementation (Background Information); Flaw Limit Table Issues	Industry/NRC	Dyle/Mitchell
11:30	Applicability of Alt PTS Implementation Issues to Other Risk-Informed-Based Rules and Exemptions	NRC	Mitchell
11:45	Public Comments	All	Stevens
11:50	Review and Action Items	All	Stevens
12:00	BREAK FOR LUNCH		
1:00	RPV Integrity Database Discussion	NRC	Kirk/Stevens
3:30	BREAK		
3:45	Public Comments	All	Stevens
3:50	Review of Action Items - Database	All	Stevens
4:00	ADJOURN		

* Interested parties should pre-arrange relevant technical presentations by contacting the designated NRC meeting contact.