

July 22, 2005

Dr. Roger E. Stoller, Chairman
ASTM Committee E10
Oak Ridge National Laboratory
Building 4500S, MS-6138
P.O. Box 2008
Oak Ridge, TN 37821-6136

SUBJECT: ASTM LETTER ON NRC STAFF PARTICIPATION IN
STANDARDS DEVELOPMENT

Dear Dr. Stoller:

I am responding to your letter dated May 16, 2005, in which you expressed concern regarding reduced participation by the U.S. Nuclear Regulatory Commission (NRC) in the American Society for Testing and Materials (ASTM) Subcommittee E10.02 on Nuclear Technology Applications. The NRC has maintained a high level of attendance at these meetings, and will continue to participate in future meetings. As an example of recent participation, the NRC has been represented by at least two staff members and contractors at every meeting of the subcommittee over the past 3 years.

Your main concern involves the ASTM Subcommittee E10.02 effort to revise Standard E900, "Standard Guide for Predicting Radiation-Induced Transition Temperature Shift in Reactor Vessel Materials." For at least 5 years, the NRC staff and its contractors have worked closely with the nuclear industry to ensure the completeness and accuracy of a database of the results of surveillance tests from commercial nuclear power plants in accordance with Appendix H to Title 10, Part 50, of the *Code of Federal Regulations* (10 CFR Part 50). The surveillance test data provide indications of the response of reactor pressure vessel (RPV) steels to neutron irradiation during plant operation. As you are aware, much of this interaction has been coordinated with ASTM Subcommittee E10.02. As a result of this work, the NRC and the nuclear industry now have a high-quality database for use in developing models to predict the response of RPV steels to neutron irradiation.

The NRC will use this database to update modeling which will be used to revise Regulatory Guide (RG) 1.99, "Radiation Embrittlement of Reactor Vessel Materials," Rev. 2, dated May 1988. The NRC will also use the updated modeling in the final benchmarking of the technical basis reevaluation for the pressurized thermal shock (PTS) rule (10 CFR 50.61), thereby maintaining consistency between the models used in the revision of RG 1.99 and the PTS rule. It became apparent to NRC staff that the consensus process would not produce an acceptable model within the schedule needed to support the effort to revise the PTS rule. Therefore, it was necessary for the NRC to continue to move forward with the modeling effort, with the intent to return to the subcommittee to provide a briefing of the results.

R. Stoller

-2-

I trust you will find this letter responsive to your concerns. If you have additional questions or would like to discuss this matter further, please contact Ms. Carolyn Fairbanks of my staff at (301) 415-6719.

Sincerely,

/RA/

Carl J. Paperiello, Director
Office of Nuclear Regulatory Research

cc: Dr. Graham B. Wallis, ACRS

I trust you will find this letter responsive to your concerns. If you have additional questions or would like to discuss this matter further, please contact Ms. Carolyn Fairbanks of my staff at (301) 415-6719.

Sincerely,

/RA/

Carl J. Paperiello, Director
Office of Nuclear Regulatory Research

cc: Dr. Graham B. Wallis, ACRS

RES#: 2005381

DISTRIBUTION: DET r/f MEB r/f F. Cherny T. Clark (RES 2005381)

DOCUMENT NAME: E:\Filenet\ML051990473.wpd

OAD in ADAMS? (Y or N) Y ADAMS ACCESSION NO: ML051990473 TEMPLATE NO. RES-006
Publicly Available? (Y or N) Y DATE OF RELEASE TO PUBLIC: _____ SENSITIVE? N

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RES/DET/MEB	<input type="checkbox"/>	RES/DET/MEB	<input type="checkbox"/>	RES/DET/MEB	<input type="checkbox"/>	RES/DET	<input type="checkbox"/>
NAME	C. Fairbanks		A. Hiser		R. Croteau		R. Barrett	
DATE	07/19/05		07/19/05		07/19/05		07/20/05	
OFFICE	RES	<input type="checkbox"/>	N RES	<input type="checkbox"/>	RES	<input type="checkbox"/>	SISP Review	<input type="checkbox"/>
NAME	P. Garrity		J. Wiggins		C. Paperiello		C. Fairbanks	
DATE	07/19/05		07/21/05		07/22/05		07/20/05	
OFFICE	SISP Review	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
NAME	R. Croteau/ALH for							
DATE	07/21/05							

OFFICIAL RECORD COPY