

NOV 03 1993

Dr. Spencer Bush
Review & Synthesis Associates
630 Cedar
Richland, WA 99352

Dear Dr. Bush:

I am writing in response to questions you raised during the recent Nuclear Safety Research Review Committee (NSRRC) meeting in Boston regarding the availability of data on A 508 Class 3 steel. As related to me, your questions focused upon whether or not the NRC has an adequate data base on this material to judge its acceptability for use in the new reactor designs.

While we do not have as much data on this material as we have for A 533 Grade B or for A 508 Class 2, the situation is not as bleak as it might seem. For example, A 508 Class 3 is the beltline forging material in approximately five U.S. operating reactors, and the material is in the surveillance programs for those reactors.

As a result of your questions, Michael Mayfield of my staff, asked William Corwin from ORNL, the Heavy Section Steel Irradiation Program Manager, to briefly summarize the available data for A 508 Class 3, and the sources of material for further testing if it is needed. The enclosed letter from Mr. Corwin provides a brief summary of the situation.

As discussed in Mr. Corwin's letter, the DE staff has taken steps over the last several years to obtain representative sections of A 508 Class 3, and pertinent data on this material, precisely because of its current and potential use in the U.S. Our approach has been, and continues to be, to rely heavily on data and experience with this material in Europe and Japan. We have included it in our irradiation capsules in a limited way, and will compare our results with those we can obtain in the literature, from the surveillance programs, through our work with developing the IAEA data base, and through our bilateral research agreements. As noted in Mr. Corwin's letter, we should have initial results from our irradiation program in 1994, and we will assess the need for additional testing and the magnitude of that work if it is needed.

I hope this information addresses your concern about data on this material. We certainly share your view that the NRC needs an adequate base for making

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regulatory decisions, and we believe that our current approach will provide that data base. If we can provide you further information on this matter, please contact me or Mr. Mayfield at (301) 492-3844.

Sincerely,

~~Original signed by John W. Craig~~

for

Lawrence C. Shao, Director
Division of Engineering
Office of Nuclear Regulatory Research

Enclosure: As stated

cc: Eric Beckjord
NSRRC Members