

March 15, 2001

Mr. H. A. Sepp, Manager
Regulatory and Licensing Engineering
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, PA 15230-0355

SUBJECT: FUEL CLADDING DUCTILITY

Reference: Nuclear Engineering and Design, Volume 147, No. 1, Page 53, Comparative Studies on High-Temperature Corrosion of ZrNb1 and Zircoloy-4

Dear Mr. Sepp:

On January 26, 2001, the Nuclear Regulatory Commission (NRC) staff sent you a letter requesting a meeting or a submittal on the above subject, in light of questions raised by published embrittlement data on ZrNb1 cladding (Reference). In response to our request, Westinghouse met with the NRC staff on February 26, 2001. At the meeting, you presented the results of preliminary tests intended to directly address the question of applicability of the 17 percent loss-of-coolant accident (LOCA) oxidation limit to Zirlo cladding. The data included some initial ring compression test results and discussion of the material differences relative to the material tested in the referenced document. The staff appreciated the opportunity to discuss this issue with Westinghouse, and the inclusion of the preliminary results of your ring compression tests was helpful.

Based on the preliminary test results you presented and your analyses of Zirlo cladding, we believe that the LOCA oxidation limit of 17 percent as approved for Zirlo fuel cladding material continues to be the appropriate value. In order to complete reevaluation of this issue, we look forward to your presentation of the final results from your test program during our semi-annual fuel performance update meeting in May 2001. If any test results are different from the expected values based on your preliminary tests, please inform us. The staff's meeting summary, which documents the presentation, discussion, and the staff's conclusions, is available under ADAMS accession number ML010740380.

I wish to commend you and your staff for your prompt response in scheduling the meeting and for its informative content.

Sincerely,

/RA/

Stephen Dembek, Chief, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Project No. 700

cc: See next page

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Project No. 700

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