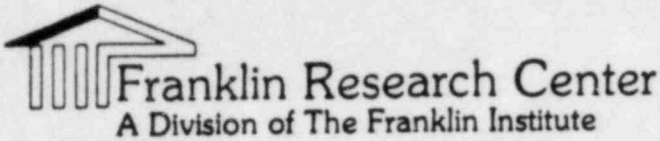


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Z. ZUDANS, PH.D.  
Senior Vice President and Chief Operating Officer

May 31, 1983

Mr. John C. McKinley  
Advisory Committee on  
Reactor Safeguards  
Project Review Branch #1  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Re: 1. Reactor-Vessel Thermal Stress During Cooldown, your letter dated May 20, 1983.  
2. D. E. Eisenhut, letter to Commission, April 12, 1983.  
3. B&W letter to R. C. DeYoung, dated March 18, 1983.

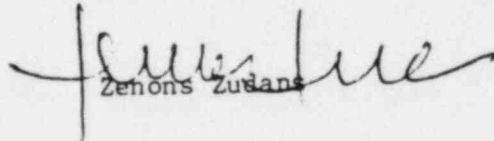
Dear Mr. McKinley:

In response to your letter dated May 20, 1983, I have reviewed the enclosed reference documents and offer the following comments.

The concern about thermal stress during St. Lucie's upper head voiding event(6/11/80) is appropriately identified as in Ref. 3. As stated in Ref. 3, large thermal gradients could have been developed during this event if there was no mixing of the stagnant fluid as a result of lower temperature coolant flowing below and past the stagnant fluid area.

I believe there will be some mixing and the thermal gradients in the structure will not be as pronounced as derived by the conservative computations described in Ref. 3. Since, in general, the determination of heat transfer coefficients in a more or less stagnant fluid is not associated with great accuracy, I concur with Mr. Taylor's recommendation, Ref. 3, to obtain the actual metal temperatures by measurement.

Yours very truly,

  
Zenons Zusans

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cc. Dr. P. Shewmon

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