

**From:** Mark Kirk *RES*  
**To:** Steven Long *NLR*  
**Date:** 7/26/02 2:43PM  
**Subject:** DB Cavity Growth Analysis - Preliminary Results

Steve -

We just today received some results from ORNL that we are in the process of checking / reviewing ... i hope to have something out to you on this by Wednesday or Thursday of next week. In our latest analysis we have the following:

For a model with a uniform cladding thickness of 0.24-in. (the minimum measurement reported for the DB cladding by the licensee) we have a FE model that has an exposed cladding area of 130 sq. in. This area is 3.7 times larger than our estimate of the "as found" area, which is 35 sq. in. At this area of exposed cladding (which, by the way, engulfs half of nozzle 11) we get an estimated instability pressure of 3330 psi. This pressure is still substantially above the operating pressure of 2165 psi, especially when you consider that in our investigation of the "as found" geometry we determined that the instability pressures we predict using FEA are typically 8-9% below those measured experimentally.

As i mentioned earlier, we hope to have a more comprehensive set of results to share with you by mid to late next week.

Mark

>>> Steven Long 07/23/02 03:16PM >>>

Any news from ORNL on how the cavity failue isze iteritions ar coming?

**CC:** Bass, Richard - ORNL; Deborah Jackson; Edwin Hackett; Mark Kirk; Nilesh Chokshi; Wallace Norris; William Cullen; Williams, Paul - ORNL

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