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To: Undine Shoop
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Subject: PBR thoughts

If lose forced circulation, what is max temperature seen by primary system pressure boundary? (I'd be reluctant to accept single-dimension analyses for this since I would expect to have significant temperature gradients in dimensions perpendicular to the direction of flow - ie: I expect hot spots.)

If lose He, what keeps the core cool? (Here, we have lost key parameters that contribute to both heat transfer and heat transport, such as density and thermal conductivity. I would expect to have a significant contribution from radiant heat transfer over short distances, but in the overall scheme of things, I suspect the core will act as multiple foils that seriously limit heat transfer by radiation. That probably leaves convection heat transport as the dominant cooling methodology. And I'm not sure there will be enough of that.)

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