

Presentation of Gidropress recommendations for Pb/Pb-Bi properties will need a lot of paper work and approval from Rosatom (former Minatom). But in my impression it is not so necessary. Presented data from KFK report are rather adequate. I have made brief comparison of data we use, data from KFK report, data from ANL and some data published in Russia. I found the following discrepancies depending on temperature range

Density 1-2%
Viscosity 5-10%
Heatconductivity 5%
Surface tension - full agreement
Heat capacity 1-5%

It looks quite acceptable and I agree with Dave, that we should not compete with specialized working groups in this area.

We do not found any good experiment with LBE natural circulation and probably have different understanding of supposed thermohydraulic benchmark.

My proposal is to go by the same way as we go with RBEC neutronics benchmark. Can ANL and/or Kurchatov Institute prepare simplified (1D) geometry data for STAR-LM or RBEC primary circuit adequate for thermohydraulic calculations?

I look at STAR-LM and RBEC because they were initially proposed with high level of natural circulation.

My impression is, that even if we exclude 3D effects from our review it will be quite good example for international benchmarking.

If somebody is interested in such benchmark, than Gidropress will participate in it.

Best regards,

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