

Magnetic Shielding Meeting – 21/05/2013 15:00-16:05

Present

Ian Taylor, Kiril Marinov, Paul Smith, Mike Courthold, Melissa George, John Cobb (PT), Pierrick Hanlet (PT), Jason Tarrant (chair)

1. Message from Ken to Kiril (via JT) We will source design effort from ICL or PPD for the PSU & turbo pump shields.
2. Paul's Talk
 - a. Meshing errors – Using Opera's BH curve resolved (as opposed to the JHR curve that has an irregularity near the start)
 - b. Klaus at VF using R16 Opera and slashing solve times, Paul to get copy ASAP
 - c. Luke Fry list - issues as drawing does not specify dimensions, **Action: Luke and/or Craig to get positions of 'Fry list' components for Paul**
 - d. **Action: Mike & Paul to visit VF before 'holiday season'**
3. Kiril's Talk
 - a. Kiril showed the effect of different thicknesses of 1010, 10mm & 15mm, concluded 15 mm 1010 should be OK with option for +5mm plates if required
 - b. Showed a shield option with no chimney and the modelling that showed there to be sufficient shielding around the sensitive parts of the turbo pump even with no chimney
 - c. If the solid single wall shield is too heavy then Kiril could look at a layered construction but the engineering of the support of the solid shield not looking overly difficult yet
 - d. Kiril mentioned that the direction of the field may be changed by / in the magnetic shield
 - e. **Action: Mike C to check for any magnetic / ferrous content of the turbo pumps that might cause a draw on the magnetic field inside the shield**
4. Melissa's Talk
 - a. Melissa has post processed the R9 model and sent data to Celeste. Mike C thought it would be more relevant to use 'mild average' rather than 1010 BH curve for this area, **Action: Melissa will run the model again with mild average.**
 - b. A coarsely meshed model of R9 was shown that required refinement, **Action: Melissa will speak to Klaus @ VF to ask for tips on refinement and when ready will send on the model to VF for checking.**
5. AOB - None