# MICE Magnetic shielding meeting: 2013-04-16: 15:00 BST

### **Venue at RAL: CR01 (phone conference details circulated)**

Present: CMacW, IT, HW, PS, KL, JT, PH, MC, JC

#### 1. Actions

PS, KM, MC with KL: Seek solution with VF for model validation;
 Order has been passed to RAL Contracts. T. Medland and A. Nichols have authorised the proposed contract. CMacW will chase. Note added: contract has been placed. So agree that PS will place first issue in motion. Action closed.

### 2. Magnetic model of MICE Hall:

PS

- See slides. Points noted:
  - o Progress in increasing accuracy of model through use of error function.

### 3. Magnetic model of tracker cryostat

KM

- KM unable to attend but provided the following report:
  - I have now collected all the parameter values relevant to the operation of the cryostat turbomolecular pump and have spoken to a vacuum scientist here at DL. He is away this week but has promised that next week he will do some calculations and will try to assess the consequences of moving the pump away from its current position. This should simplify the problem of shielding the pump.
  - The work on the cryostat PSU shield is on-going. I should be able to report on this next week.

### 4. Magnetic model of racks and R9

MG

- No update this week. Urgent now to update model to compare with measurements.
- KL raised possibility of making measurements of the fringe field around the spectrometer solenoid to replace the measurement programme planned for R9;
  - Our consensus is that taking measurements is a valuable thing to do. R.~Preece will
    discuss with the team at Wang to see if additional data can be taken. Field model
    will then need to be prepared.
  - PH commented that some data had been taken. This would be presented at next week's meeting.

### 5. Partial return yokes: magnetic analysis and design

HW

• Funding for engineering work now in place. S. Plate will continue to develop engineering in consultation with JT.

#### 6. Progress on magnetic measurements and validation of model IT

Need model of R9 before additional comments can be made.

## **6.1 Progress on assessment of substation-components**

JW

• No report this week.

### 7. Schedule and plans, discussion

**CMacW** 

- CMacW has passed the following milestones to A. Nichols and G. Hanson:
  - Modelling validation: Jun13;
  - o Tracker shielding plan: Dec13; and
  - o Infrastructure and facilities shielding: Apr14.
- Agree to organise a schedule discussion for two weeks time. CMacW to coordinate.

#### 8. DONM:

23Apr13; 15:00 BST

#### 9. AoB

• None.

### **Summary of actions:**

- **KL:** Add summary of Wang measurements of the stray field to agenda for next week's meeting.
- **CMacW:** Coordinate meeting to discuss the schedule.