Magnetic shielding meeting: 2012-10-28: 15:00 GMT

Conference Room 4, R1 (phone conference details circulated)

Present: PS, ABI, KL, HW, AG, JW, JT, MC, CMacW, DA, AG

1. Actions:

- ABr: Pursue development of test of non-standard lengths of Cryomech hoses Stands.
- **PH:** Simulate Wang situation and compare to the measurements made by LBNL colleagues. PH emailed to say that he has looked at Wang situation and will present next week.
- IM: Liaise to ensure that Hall probes are installed and readout during SS and FC energising.

 JW reported that IM and PW have discussed and will borrow a probe for FC in the short term and looking at purchase of probes. Agree to try and implement a small number of probes.

 Action stands. Action moved to CMacW.

2. Status of review of items in Hall and contacts with system owners: LF/MOM

• No report this week.

3. Status of magnetic model of MICE Hall: PS

- Issues with making the Hall model work. Seems that the upgrade to the OPERA system has caused the suite not to work. PS plans to roll back to the previous version;
- Discussed whether we could freeze the version to avoid such problems in the future;
- Sub-models:
 - MC has made some issues with the implementation of the sub-models. Today have seemingly found the solution. Issue was air and metal occupying the same volume within the module. Now checking the results;
- Additional effort:
 - MARS Group at DL; KL to contact;
 - Student effort from Imperial might be available to help with, for example, the RF amplifier and the tracker equipment;
- Agreed that PS would present derivation of boundary conditions for submodels;

4. Status reports:

Racks behind north wall: TH, IM

• JW reports that the AFC rack build is on target. Working on the SS controls issues to finalise any details.

Compressors along west wall: JT

• No update this week as have been looking at the additional rack room.

Rack room 2: JT, JW, IM

- 5 options were discussed. Agreed that we need to work towards reducing the options that we would like. Then arrange a meeting with ISIS to discuss options with them and understand impacts on them;
- CMacW reported his analysis that indicates that there may be problems for ISIS equipment. We need to take stock and then explain the situation to ISIS. This would happen in the proposed meeting with ISIS.
- Agreed:
 - Working assumption is that compressors will be in the Hall to free space and to move noise into the Hall. Review next week.

5. Discussion of options:

Partial return yokes: HW

- See slides: <u>here</u>
- MC asks that HW checks slide 13 to see whether the location of the plant room is correct. Suggest that PS helps HW with dimensions.

6. Consideration of shielding for tracker: PS, MC, CMacW

No report this week.

7. DONM:

05Dec12; 15:00 GMT

8. AoB

- KL: proposed joint meeting with ISIS after Christmas. This was agreed. KL to follow up.
- CMacW: VB modelling compressors in R9. MC reports that VB has started on this. Need to add as an agenda item along with SS modelling owned by PH and VB;

Summary of actions:

- ABr: Pursue development of test of non-standard lengths of Cryomech hoses
- PH: Simulate Wang situation and compare to the measurements made by LBNL colleagues.
- CMacW: Liaise to ensure that Hall probes are installed and readout during SS and FC energising.
- KL: Liaise with ISIS to set up joint meeting after Christmas.
- KL: Contact DL MARS Group to see whether some effort might be available.
- KL: Add agenda item on modelling the existing situation owned by PH and VB.