

Magnetic shielding meeting: 2012-09-05: 15:00 BST

Conference Room 1, R1 (phone conference details circulated)

Present: PS, JT, RP, KL, PH, HW, CMacW, TH, VF, JW, CW, IM, JC, AG

1. Actions:

- **PS:** Update geometry and add quads;
 - Quads not yet attacked. Progress noted below. Stands.
- **MC:** Make prioritised list of items to be added to the magnetic model;
 - Superseded.
- **AN, KL:** How to add effort (perhaps B. Sheppard);
 - Underway; Jim Clarke et al will visit Roy Preece on the 10th September;
- **PS, MC:** Send transverse forces to mailing list;
 - Stands. MC has made progress on calculation, results are expected soon;
- **JT:** evaluate cost and complexity of shielding compressors at south wall
 - Stands.
- **IM:** Evaluate cost and complexity of shielding compressors at west wall
 - Discussed under agenda item below;
- **MC:** evaluate effect of racks on field in RF area;
 - In hand;
- **RP/AG:** evaluate the installation of the RF amplifier
 - Done; see paper;
- **TH, JT, IM, MC, AG, RP:** Write paper for presentation to the TB for positioning of the racks behind north wall;
 - **Agreed:**
 - Finalise the report by 05Sep12;
 - Review at our meeting on 05Sep12;
 - Send AN for TB on 07Aug12.
 - Discussed on agenda below;
- **IM:** Check content and limit on operation of the substation;
 - Action stands; need to make our own assessment. Most likely need to study field;
- **PS, MC:** Consult C. Rogers on version management scheme;
 - PS spoke with CR; have not yet set it up, but plan to use launchpad using Bazarre. Action stands.

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

LF/MOM

- Email from LF:
 - I have sent it to all of the system owners that I have contact details for, more specifically those that are on the outlook directory.

3. Status of magnetic model of MICE Hall

PS

- See slides;
- Problems with model transmitted to Vector Fields. They reported some fixes to make performance better. With these modifications PS has made additional studies with the magnetic model;

- **Plan for next steps presented.**

4. **Discussion of options:**

All

- **Racks:**

- Behind north magnetic shield wall;
 - RP: took us through the paper which was circulated.
 - Comments requested from all by the end of the UK working day tomorrow (Thursday 06Sep12).
- On the mezzanine level to the north east;
 - Back-up scenario at the moment;

- **Compressors:**

- Along west wall;
 - Confirmation of fields from modellers would be valuable to be added to the west-wall paper;
 - Siting of water plant needs to be resolved;
 - Input from JT on service routes for high-pressure hoses;
 - Present information is 20.1m max length for cryomech high-pressure hoses;
 - Again, comments are solicited by end of the UK working day tomorrow;
- Present scheme, i.e. inside south magnetic shield wall;
 - Not considered a viable option at the moment.

- **ISIS plant room:**

- KL plans to take reports to D. Findlay to ask whether we can study the plant room option.

- **Partial return yokes:**

HW

- See slides;

- **Igloo:**

- Closure of ends of shield wall.
 - On hold for the moment.

5. **Exposure of equipment to magnetic field**

CMacW, RP

- No report this week;
- **JC reminds us of ITER contacts. Idea was discussed once more. Need to work out a plan which might involve ITER;**

6. **List of specific items to check**

PS

- ***LH2 delivery systems***
- ***Q9 power supply***
- ***HV rack***
- ***Control rack for compressors, vacuum etc.***
- ***Vacuum pumps***

- **Substation**
- **Equipment on the roof**

6. **AoB**

- **IM:** asks what information is available from tests at Wang NMR.
 - **Action: RP:** check with SS team what the experience is;

Summary of actions:

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