CW, KL, SW, PH, JB, PMH, AG, AB, JP, MP, PS

• Actions
Actions on CW complete.

• Decay solenoid FuG power supply – SG
Report on FuG repair
"We discussed options for DC mechanical contactors we have reviewed, he is familiar with one of the companies (Schaltbau).
The MD agreed to pass the specifications we have provided to his technical staff, they will review and alert us if there are any perceived problems.

We will continue to liaise with the two contactor companies (Schaltbau and Mersen) in ensure that we have a very high confidence in the breakers we select.

Once the contactors have been selected we will place the order and free issue them to FuG.
FuG have agreed to clean the unit, repair minor damage and test the circuits, order and build new control card and replace the thermal switches with latching devices, while they are waiting for the contactors to be delivered.
They will design and implement the connections and interface to the DC contactors and then install the breakers when they arrive at FuG.

FuG are happy to pay for the works listed provided we purchase the contactors, we feel that that is a fair compromise.

We discussed timescales and FuG felt confident they could deliver an operational power supply by the beginning of February provided they receive the contactors at the beginning of January.
We must therefore do our upmost to provide FuG with our selected contactors as soon as possible.

AB noted that there was no diagnosis of power supply failure mode.
Action on CW to ask SG/FuG for failure analysis.
AB we should agree procedures for test at FuG factory before return to RAL?

KL noted that FuG agreed they will travel to commission power supply at RAL.

• Focus Coil/Hydrogen system – SW
FC passed test at 225A and 24 hr soak test. FC run reverse polarity at 100A. More running with FC this weekend.
H2 – remeasured leaks

- external leak - one specific feedthrough - through pins. -3 level leak into insulation vacuum.
- Internal leak -3 level leak from h2 vessel to insulation vacuum.

Requires intervention.
Xenon running may not be possible pre Christmas.
Action on SW JB. to develop plan to investigate h2 repair with contingency. SW indicated 10 weeks.
MP project needs to focus on most important targets, SS power supply improvements should take priority.
KL would switching to LiH impede H2 work?
Action on CW KL to detail possible LiH running scenarios to allow running with LiH while H2 system is repaired, possibly using other FC as test stand (no cooling or powering of magnet, just used as a placeholder).

• Spectrometer solenoid – MP
◦ MAP directors technical review report
MP some good points

1. committee negative about development/RD to improve coil. Pessimistic that team could reliably correct training behavior.
2. Need to go to industry with experience in manufacturing this type of magnet. MP FNAL thinks magnets are different and there are fundamental design differences due to forces. Agree winding expertise does reside in industry.
3. High priority to improved QP and QD. FNAL plan thinks this is possible for the April ISIS run. Team at FNAL are trying to provide QD/QP for SSU ECE coil triplet, ready for Feb ISIS run.
4. Support for building new cold mass. If not ready, back up plan would be: repair of existing cold mass with shield removed – more extensive rebuild scenario.
5. Timescale for new cold mass would be no less than 1 yr, starting Jan 1st. All 2016 in step IV running.

Pull SSD end Dec ISIS 2016.
Without M2 in SSD, would best case be to delay detailed emittance measurement to end of data taking period? Run with only ECE in SSD, more survivable.
KL Panel also positive on program and appreciated work done

since 13th Sept. We should recognize that effort.

MP thinks industry order for bobbin in 12 months is optimistic, preparation to place order adds 3-6 months. MP justify experimental plan on this basis.
AG - repair work, is SSD going to FNAL?
No plan as yet.
Committee suggested not shipping whole magnet.
Committee thought repair in UK was OK.
MP thinks this includes more risk than appreciated.
Shipping cost and timescales are not the drivers, risks are more important.
Committee emphasized need for an expert team.
AG, budget?
MP - cost is outside contingency by ~0.75M$, not clear what DoE will do, would like it to fit in existing budget, MP -3:1 it will not be in budget.
Schedule is also outside limits?
MP DoE has accepted funds could run over into '18.
DoE will object to increased total, negotiations to take place.
MP this was intended to start today, meeting delayed to later this week or next week with Mike Precario, who will want MP opinion on budget. MP plans to say he has 80-90% confidence it will not be in existing funds.

• Hall cooling water – CW.
Tested delta T 10-12C - good. Designed for 25C.
Update, significant copper contamination was found when cleaning Q6, strong recommendation that remaining conventional magnets should be cleaned in January.

• PRY – CW
Waiting for SPlate update.

• LiH – CW
Waiting for quote from Y12, no estimate of time. Y12 have new staff AB to chase before new year.

• Response to RF review - CW/KR
No current update. Docs will be posted

• Hall Hit List – CW
Pressure regulators are in hand.
FNAL TD need module for QP upgrade. QMI module needs to return to FNAL. Will pack and ship. PMH.
DL have dump trays. **Action on CW** to discuss with SG. Update DL

advised as to situation regarding dump trays, may leave at RAL.

AOB

KL MICE UK c2c (cost to completion) will be 12/2/16.
PS c2c paperwork 21st Jan.
This requires joined up planning which may not be completed but plan and schedule needs to be clear.
MP hope to have deployed ECE coil package in SSU by then.
MP will front load effort for updating step IV.
KL how do we keep up to date - Weekly MIPO. Next Wed same time. **Action CW to circulate**.
Request to AG to iterate c2c costs – difficult. **Action CW** to contact RP.

Response to MPB
Bi-monthly report.

PMH – add 2 hall probes to exterior of FC. Try with SSU/D hall probes.
AG - schedule, if we data take to end 2016 can we ease RF?
MP/AB rf cavities are on schedule, agreed we should maintain RF program to service this.