

MIPO 31st January 2017

Present: CW, KL, AK, PG, AG, JB, MP, PMH, AB.

Actions

Action PO. Set current to zero whenever contactors open/close.
Complete

Safety

- PPD review – CW

Date set 02/02.

PPD/ISIS

1. General overview.
2. Hall visit.
3. Discussion of SoPS events.
4. Hydrogen system

H2 system

Update – CW.

- Neon test worked. Proved that with liquid, delta T between condenser and absorber is less than 0.5K.

H2 installation in MICE hall.

Would require data-taking to stop on 6th March.

Propose to use 'turret swap' technique – FC magnets are not changed.

- KL should do H2 install as it is promised program and increases chance of persuading reviewers to recommend extended running.
- MP favoured if H2 engineering can be achieved. Also believes H2 option improves forward look. H2 is necessary risk.
- JB does H2 require higher magnet forces? KL theorists have been charged to produce currents. Expect result of sims will give similar currents to those already investigated.
- AB considers H2 installation proposal is reasonable.

Decision from MIPO. Install H2 system starting 7th March 2017.

Magnets

- Status update.

Isolated into 'shorts'.

Pierrick almost finished controls software.

Single magnet GUI 'beta' test.

Instability in SSC ECE power supply into shorts. Not able to ramp down from GUI. Repeated test and disabled rs232 from AMI. Fault still present. Swapped AMI, still present. Possibly only 'short' related – will not be present into inductive load. Further evidence for this theory presented in MLCR. DL proved instability is constant across 3 different AMI controllers and appears once output voltage exceeds certain value (exact voltage value of onset of stability varies from one device to another, but behavior is identical)

AK, PMH definitely not related to earlier SoPS event.

Divergent ramp did trigger when instability was present in some but not all cases. Issues with divergent ramp initialization are likely cause of non-triggering.

RF

- RF Modules – AB Module 1 completed - vac seal on copper gasket. 4×10^{-8} in cavity.

Crates delivered this week,

packed by end of month or on its way.

Send via air to Heathrow **Action AB** to advise if name of customs agent is required.

- RF Power

CW/KL applied for £800k for RF from projected £5M STFC underspend. Authorised DL spend to contract build RF controls £12k.

Amplifier at DL- decision not to repair as low power operation sufficient to test controls. Risk fo repair too high.

- Hall Water –CW

Completed, high current tests this week

- Controls review – KL

Draft summary on MIPO page.

Stale values can be left. Potential cause of SoPS.

Actions to mitigate effects are:

1. Reduced command set.
2. Current set to zero at contactor state change.
3. Multiple actions to change state.

DR to doodle new meeting. Divide tasks into C&M and those actions for review which will be completed before review is wound up.

- ISIS shutdown task list – CW
Hall work complete – update at end week.

- Paperwork preparation. CW/KL
Paperwork required for end of week.

- AOB
Magnet cover as related to PMH.
Action on AB to clarify US position to CW or MIPO.