



UK Update Package Managers Meeting 001

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13th January 2014

Progress and Work

- **Magnetic Mitigation**

- West mezzanine installation will be in 2 weeks time and should be completed before the end February
- Rack room 2 power will be installed 30th January
- PRY design a little behind
 - Base for the North side
 - South side delivery in May
 - North side delivery July
- Opus are looking into the changes for the south side mezzanine
- Discussions of construction method for trench room to be carried out

- Drawings are with Andy and they will be reviewed – PRR process being handled by Andy
- Drawing pack has been sent out to vendors for quotations, feeding into the PRR.

- **Focus Coil**

- FC 2 Has been shipped back to Tesla
 - The bore tube weld and flange weld will be worked on Wednesday
 - Initial investigation and Focus coil team will have a meeting with Tesla
 - Leak from Helium volume to vacuum
 - Sensor on the bore had some issues during cooling
 - Thermal efficiency not good – something touching warm bore
- FC 1 back into position
 - Insulation around coolers inserted
 - Straps tensioned
 - Cold by the end February
 - Testing



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- RF

- Maximum of 500kW
 - Maximum that the absorbers can handle
- TIARA project deliverable complete – report being constructed
- Some further tests to be carried out – Current measurements in the triodes
- Once complete the power supply will be shipped back to DL
- Single cavity test in the hall at RAL?

- Liquid Hydrogen System

- Many of the changes that were thought to be needed will now not be needed due to the installation of the PRY
- Another Hazop needs to be carried out before Step IV operation
- Fit check of the absorber will be carried out on FC1 while it is being cooled.

- Tracker

- Full installation projected to be completed early April
 - Date includes slack
 - Interaction with the FC team to stop installation during testing periods
- Hall probes are available for installation
 - Unknown how many
 - Placement needs to be confirmed
- Bore is 1 – 2 mm out from required according to the survey data taken
 - Need to understand the implications
 - A model of the data taken is being constructed to visualise



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- Vacuum
 - Manifold system will be installed.
 - Full automatic control.
 - Systems shipped for the solenoids will be used along with new items purchased.
 - Envelope has been integrated into the integration model.
- Electrical
 - Decay Solenoid power supply installation schedule for end February
 - After the DS fix has been completed
 - Test of the DS with the old power supply has been completed
 - All 7 racks are now nearing completion
 - Some instrumentation still required – Lakeshores, AMI
 - Vacuum / Compressor rack under construction
 - Quench detection systems for the CC and SS
 - What is required for the UK
 - SG and PH will be meeting to discuss



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- **Spectrometer Solenoids**
 - 2 weeks of pumping has been started
 - Cooldown will commence after that taking around 5 days
 - Powering tests will start after stable thermally and all checks o the system have been completed
- **Coupling Coil Magnet**
 - After the new ribs have been installed and wrapped with the new blankets there should be just a 3W load to the cold mass
 - The process of rib installation is 90% completed
 - Myer tool will attend Fermi Lab to assist in the installation of the first blankets to the cold mass
 - Installation starting early next week and will take around 1 week
 - Cooldown Mid February
 - Powering test Late February
 - Some high pot problems with a screw puncturing the Kapton layer – this has been addressed and is no longer an issue
- **Coupling Coil Cryostate**
 - The final stages of the build are not possible at LBNL, finish weld and tight tolerance bore machining
 - An external vendor has been found that will be able to complete
 - The welding and machining will be finished in 2-3 weeks
 - Once signed off after acceptance checks the cryostate will be shipped to Fermi Lab



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- RF Cavities
 - Single cavity test stand construction is nearing completion
 - Waiting for the final work on the couplers
 - All 6 tuners are on the cavity
 - All actuators are installed
- With the current state of the construction project the projected completion date for STEP IV installation is late January 2015.
- Meetings of the UK Package Managers and US MAP package managers have started
 - Schedule information from each meeting will feed into the larger schedule
 - Dashboard updates will be made shortly after the meetings



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