

RAT in P4 - *Status of Sector 45* - Preparation of Cool-Down

HARDWARE COMMISSIONING COORDINATION - WEEK 8

23th February POINT 4

Sector 45 (M.Solfaroli, B.Perea Solano)

EIOA (D.Bozzini)

- According to the EDMS document number 816458 the non-conformity at the level of the DFBXE in point 5L is being solved. The solution proposed is to turn 90 degree the structure holding the transformer (under approval, see EDMS document 817499).

CRYO (A.Suraci)

- They received 30 new crates in Meyrin that are under preparation in order to deliver them by end of next week in the tunnel.
- Deployment of signal cables has been done in the arc.
- They are mounting their equipments in the racks in the protected areas.
- Electrical connections between heaters and electrical cabinet are ongoing (2x100 KW) heaters.
- 8 capillaries for pressures sensors between RF cavities and UX45 are on going.

Installation (E.Barbero)

- NEG activation:
 - ✓ E5L4 and E5R4 has been carried out this week (wk 8);
 - ✓ D5R4 and D5L4 will be carried out during next week (wk 9);
 - ✓ A6R4 will be carried out during week 10;
 - ✓ A7R4 will be carried out during week 11;
 - ✓ A7L4 will be carried out during week 12;
- Jumper's interconnections will be finished by the end of this week.
- Interconnections:
 - ✓ Q5L5/DSL will finish on 28th February;
 - ✓ Q6L5/DSL will finish on 28th February;
 - ✓ Q4L5/DSL will start on wk10.

Cryogenics (S.Junker)

- S.Junker informed that he needs three slots to perform the Leak tightness tests (pressurize 3 bars) and functional tests on the DFBs pressure valves. He proposed Friday 2nd March (wk 9) for the DFBMs (4R), Friday 9th March (wk 10) for the DFBAH (4R) and Friday 16th March (wk 11) for the DFBAI and DFBXE (5L).
E.Barbero informed that:
 - ✓ The slot on 2nd March is ok.

- ✓ The slot on 9th March has to be checked with respect to the intervention that TS/CV has to do in all the water cooled cables. It will be confirmed next week.
- ✓ The slot of 16th March should be OK.

WorldFip (C.Dehavay)

- C.Dehavay informed that, in order to have the worldfip working in sector 45, two more power outlet are necessary. The first one is needed in US451 in order to power the rack CYTIM. Close to this one there is a network rack (CYNET) that is already powered. The second power outlet has to be installed in the arc 45 at the location A34R4.

Open Issues

Current Leads

- 23.01.07 Current lead cable non-conformities : 1515511 1515512 1515513 1515514 1515516 (L.Poyet + J.C.Guillaume)
- 15.01.07 Current Lead heater functional tests LSS4R (P.Chambouvet)
- 15.01.07 Current Lead heater functional tests LSS5L (P.Chambouvet)
- 15.01.07 CL Insulation Vacuum DFBAH, DFBNL/K/G in LSS4R (P.Chambouvet)
- 15.01.07 CL Insulation Vacuum DFBAI, DFBL, DFBNX in LSS5L (P.Chambouvet)
- 30.01.07 120A mechanical connection DFBAH, DFBNK/L/G (P.Chambouvet/P.Denis)

QPS

- 31.01.07 LSS5L DFBAI, DFBL, DFBNX continuity/assignment cables and HVT - non-conformities to be repaired by J.Mourao and TS/EL(R.Denz)
- 31.01.07 LSS4R DFBAH, DFBNK/L/G continuity/assignment cables and HVT - non-conformities to be repaired by J.Mourao and TS/EL(R.Denz)

Cryo-Instrumentation

- 16.02.07 Manipulation of cryo valves (A.Suraci)
- 16.02.07 Connection of the temperature sensors and control cables (A.Suraci)

Other issues

- 15.02.07 Check of PC in U47 because of water leakage

Open Issues (followed by TS/IC)

- 23.02.07 Installation of two power outlet (required by worldfip) in the arc 45
- 29.01.07 Installation of UPS PIC boxes (E.Barbero)

- 22.01.07 Interconnections around DFBAI, Q5-DSL, Q4-DSL
- 29.01.07 Interconnection and WRL connection DFBAH (LSS4R)
- 16.02.07 Installation and activities on the DFBL - meeting in the field

AOB

- 06.02.07 WorldFip in Arc 45 (C.Dehavay)
- 06.02.07 WorldFip Tests in Arc 45 (week 08) (J.Thomsen)

AC non-conformity

- 13.11.06 Non-conformity of the crates of cryo instrumentation (inrush current) (A.Suraci: ready next year)
- 13.11.06 Non-conformity of the AC cabling of the crates under the magnets. This concerns ACR, MEL & VAC.

DC cabling

- 29.01.07 Cabling 13-6kA in DFBAH, DFBMK\G in LSS4R(Flohe)
- 05.02.07 Correction of two water-cooled cables on the DFBAI - Flohe (LSS5L)

Cryo-Instrumentation

- 06.02.07 Cryo instrumentation racks installation in Arc 45 (A.Suraci)
- 16.02.07 Pulling profibus cables in UA47 and USC55

Warm Vacuum - NEG Activation

- 05.02.07 NEG Activation in Q6-Q5 LSS5L (to be finished 9th Feb)
- 05.02.07 NEG activation in Q5-D3 LSS4R (to be finished 16th Feb)

Other issues

- 12.02.07 Activity on the water pressure valves for the ACNs

Closed Issues

Non-conformity (EDMS 816458) at the level of the cable trays installed above the DFBXE (D.Bozzini)	22.02.07
P.Denis check of the 6kA and 13kA cable presentation in LSS4R	12.02.07
Pre-mounting 600-120A in DFBAI LSS5L (TS/EL)	09.02.07
Pre-mounting 120A in DFBMk/L/G LSS4R (TS/EL)	06.02.07
Polarity Tests of the 120 A in DFBAH, DFBMK, DFBSML and DFBSMG in LSS4R (TS/EL)	29.01.07
Pre-mounting 600-120A in DFBAH (TS/EL)	26.01.07

Closed Issues (followed by TS/IC)

Interconnection and WRL connection DFBMK/L/G (LSS4R)	16.02.07
Interconnections around Q6-DSL (LSS5L)	26.01.07
WorldFip in UA47 and in Arc 45 (C.Dehavay)	06.02.07
Cabling 600A and 120A in DFBAI, 120A in DFBL in LSS5L(INEO)	09.02.07
13-6kA cabling at the DFBML in LSS4R (Flohe)	06.02.07
Cabling 13-6kA in DFBAI and DFBX in LSS5L(Flohe)	19.01.07
Cabling Q6, Q7, Q8, Q9 and Q10 in LSS5L (INEO)	26.01.07
Cabling of the 600-120A in DFBAH, 120A in DFBMK, DFBML and DFBMG, Q6, Q7, Q8, Q9 and Q10 in LSS4R (INEO)	26.01.07

Milestones: Test Schedule

FORESEEN DATE (provided by TS/IC)	TASK
Wk 10-11	AB/PO short Circuit tests
Wk 11	Interconnections
Wk 12-13	ELQA-TP4A
Wk 13	Interconnection Inner Triplet
Wk 15	Interconnection DFBL
Wk 15	Pressure Test
Wk 21	Cool Down Sector 45
Wk 28	Powering Tests

Matteo Solfaroli