

Preparation of Cool-Down in Sector 78 RAT Réunion Avancement Travaux

HARDWARE COMMISSIONING COORDINATION - WEEK 46

17 Novembre 2006 8 :30 2889-R-009

Present: D.Bozzini, P.Chambouvet, P.Cruikshank, S.Junker, E.Lussi, F.Millet, B.Perea Solano, M.Pojer, R.Saban, A.Suraci, R.Schmidt, A.Vergara.

Preparation of the Cool-Down in Sector78

AC cabling non-conformity:

- According to a meeting held on Thursday, several important points were raised by the Safety Commission
 - The method of joining the cables with a crimp is not acceptable.
 - The joints must be mechanically reinforced and protected.
 - Continue the tests in 78 with the connections as they have been made, with the exceptions of AB/PO, where there would be a need to retest the converters on short-circuit. It is planned to replace the 24 connections to the converters on week 48. The others will be done when possible without affecting the test planning.

DC cabling:

- 6 of the 23x2 600 A cables have been positioned on the DFBAO. Positioning continues.
- Antonio V. informs that all the 120 A cables are positioned apart from those of Q9.
- 2 Flohe operators should be available from Wednesday for 6 kA and 13 kA cables positioning on the DFBA and the DFBMs of 8L (communication from Jean-Claude).

Assembly: -

Vacuum:

- Paul informs that the leak in R7 has been repaired. The leak in the arc which was localized in Q11-8L, will be repaired today.
- He also points out that bellows damaged in Q6-Q7 LSS8L will be replaced today.
- The bake-out of Q6-Q7 is over.
- We are still on time for the pressure test at the end of next week.

Cryogenics:

- Antonio S. informs they will start the instrumentation cable HV test today in LSS8L only.

- The work on the cryo-valves is finished, apart from a defect on one of the valves of the DFBX, which should be checked. Ok for leak test on Saturday.
- Steffen informs that he had found the pressure reducing valve of the pressurized air supply on DFBs had been closed.
- The support for WRL on DFBAO will not be installed today but on Monday.

DFB Commissioning:

- The prototype galvanic insulation will be tested today at Point 6.
- TP4-A: Davide informs that the tests on DFBs are on going.
- Pascal informs that the pumping for insulation vacuum will be started next week in 7R. It will last 4-5 days.

Safety:

- The monorail has been locked off today from 9.30 to 16.30. It will be locked off again at Point 8 at 10.30 on Monday.

Preparation of Powering Procedure Test (previously called Dry Run): -

AOB:

- Pressure test in US85 after connection of He ring line (warm line) will be performed on Monday 20 at 19h.
- Paul announces magnet transport this week-end. Interference with the pressure test in a week's time needs to be checked!!!
- Jean Claude should finish the cabling for the BMPs.

Open Issues

AC non-conformity

- 13.11.06 Non-conformity of the crates of cryo instrumentation (inrush current)
- 13.11.06 Non-conformity of the AC cabling of the crates under the magnets. This concerns ACR, MEL, orbit corrector power converters & VAC.
- 13.11.06 Non-conformity of the DC cabling of the orbit corrector power converters

DC cabling

- 13.11.06 6 kA and 13 kA cables positioning at DFBAO, DFBMA and DFBMC
- 13.11.06 120 A cable connections in DFBAO, DFBMC, DFBMA and DFBX LSS8L
- 17.11.06 600 A cable positioning on DFBA

Assembly

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Vacuum

- 17.11.06 Leak in arc (Q11-8L)
- 17.11.06 Bellows damaged in Q6-Q7 LSS8L

Cryogenics

- 17.11.06 Instrumentation cable HV tests in LSS8L
- 17.11.06 Cryogenic valve manipulation on DFBX
- 17.11.06 Pressurized air supply to valve on WRL
- 13.11.06 Support on DFBAO WRL

DFB Commissioning

- 17.11.06 Prototype of galvanic insulation to be tested at Point 6
- 13.11.06 EIQA-TP4-A in the DFBAO, DFBAN, DFBAX
- 17.11.06 Pumping of insulation vacuum will start next week in 7R

Safety

General remark: written communication in advance to announce operations!!!

- 16.11.06 Cool down safety procedure & access conditions
- 16.11.06 Definition of Safety procedure for Powering Procedure Test (aka Dry Runs)
- 17.11.06 Monorail in Point 8 locked off on Monday starting from 10.30!!!

Preparation of powering test

- 16.11.06 Water circulating in UA83 for the Powering Procedure Test: filters need to be cleaned!

AOB

- 13.11.06 BPM connection in Q2, Q3, Q4, Q5, Q6, Q7
- 13.11.06 Quench protection continuity tests and cables assignment LLS7R (DFBMH, DFBAN) and LSS8L (DFBMC, DFBMA and DFBX)

Closed Issues

Visual inspection for the polarity test on DFBA	17.11.06
BLMs' monitor removal	17.11.06
120 A Cables connection in DFBAO, DFBMC, DFBMA and DFBX LSS8L	17.11.06
DS7R and DS8L leak test finished	17.11.06
Leak in R7 repaired	17.11.06
Q6-Q7 bake-out completed	17.11.06
Current lead vacuum: man power and pumping groups availability	15.11.06

Hydraulic connection of the current leads	15.11.06
DFBX AT/MEL Transformers installation	14.11.06
WRL connection DFBMH LSS7R	14.11.06
ELQA-TP3 test of the sector 78	14.11.06
Polarity tests of the 600A and 120A cables for DFBAN and DFBMH (LSS7R)	14.11.06
QUI available	10.11.06
Pressure tests of QUI and DFBs safety valves finished	10.11.06
QRL valves available for all sector	09.11.06
QRL valve opening/cabling verification	13.11.06
Interconnections DFBAO, DFBMA and DFBMC.	13.11.06
WRL connection at DFBMC, DFBMA and DFBX	13.11.06
120A cables positioning at DFBAO, DFBMA and DFBMC	13.11.06
Q6-Q11L8 leak test envelope	13.11.06
Interconnections of DFBAN and DFBMH	13.11.06

Milestones: Test Schedule

Week 45	Interconnections
End week 46 [18.11.06]	Leak Test
End week 47 [24.11.06]	Pressure Test
Week 47-48	EE sensor tests in RR77
Week 48 & 49	Purge and filling
Week 49	Dry Run
Week 49	Short Circuit tests of 60 A
Week 49	Diesel Tests
Week 50	Flushing
Week 50 [15.12.06]	Giga PAQ
Week 51	Cool Down Sector 78



Next RAT meeting

Monday, November 20th 8:30 @ P8 2889-R-009

Mirko Pojer