

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

HARDWARE COMMISSIONING COORDINATION

13 Novembre 2006 8 :30 2889-R-009

Present: E.Barbero Soto, P.Chambouvet, M.Coccoli, S.Chalay, A.Funken, J-A.Gharib, C.Guillaume, S.Junker, F.Millet, M.Pojer, B.Perea Solano, A.Poncet, R.Saban, A.Suraci, H.Thiesen.

### **Preparation of the Cool-Down in Sector78**

---

#### 1. Status of activities due for week 45:

- **Cryo. valves manipulation.** Antonio Suraci confirmed that the work is finished for DF BMC and DF BMA in LSS8L, but there is still work to be done in the DFBAO. A slot of 1 day should be allocated for this activity, preferably before the leak test that should take place Saturday 18<sup>th</sup> Nov. according to Francois Millet. The work to be finished for DF BMH and DF BAN in LSS7R will start as soon as possible this week.
- Steffen Junker pointed out that the **hydraulic connection of the current leads** to be done by AT/ACR should be finished before the electrical connection is done by AT/MEL. This has not been always respected in sector 78. AT/ACR will finish the connections early this week. AT/ACR and AT/MEL will meet today and inform tomorrow about the decision taken.
- **Non-conformity in the mini-crates of cryo instrumentation** of the arc and LSSs. Antonio Suraci will follow this non-conformity, where AT/ACR should modify their equipment in order to lower the *courrant d'appel* (as had been agreed between Juan Casas and Anne Funken during a meeting held 31<sup>st</sup> Oct.).
- **TS/EL Non-conformity** affecting the quench heaters power supply and the 60 A converters for the closed orbit correctors. Jean-Claude Guillaume informed that there had been a discussion on the issue with Simon Brown and Felix Rodriguez last Friday 10<sup>th</sup> Nov. The IST of the quench heaters and 60 A orbit correctors should start wk 49. Due to the complexity of the tests AB/PO, AT/MEL and TS/EL will start testing a few converters from week 47 in order to validate the procedures.
- Alain Poncet confirmed that the **interconnections of the DFBAO, DF BMA and DF BMC** have been completed.
- The connection of the **WRL** for LSS8L DF BMC, DF BMA and DF BX is finished. For the DFBAO there is still a support to be installed. One day should be allocated when the bake-out of sector Q6-Q7 LSS8L starts the ramp down in temperature at the end of the week. The connection of the valve to the compressed air supply remains to be done.
- Jean-Claude Guillaume confirmed that the **120 A cable positioning at the DFBAO, DF BMA and DF BMC** was done by INEO. However there are

3 x 600 A cables missing due to a problem related to the connectors availability.

- Q6-Q10 cable positioning done ??? Jean-Claude Guillaume
- Alain Poncet confirmed that the **Q6-Q11L8 envelope leak test** and that the interconnections of DFBA and DFBMH are finished.

## 2. Milestones for week 46:

- The importance of the **bake-out of sub-sector Q6-Q7 LSS8L** in order not to delay other tests was stressed.
- The **6 kA cables positioning** at DFBMA and DFBMC to be done by Flohe should start and finish end of this week despite the fact that the team stopped its activities in the tunnel last week and that priority has been given to cabling in P5.
- Alain Poncet confirmed that **DS7R and DS8L** should be leak tested by the end of the week. He mentioned that they are working out in one leak found in R7.
- TS/EL confirmed that the positioning of the 600 A and 120 A in point 7 (DFBA, DFBM and Qs) will be finished this week. However, Jean-Claude Guillaume clarified that **polarity tests of the 80 A - 120 A** cables for DFBAN and DFBMH (LSS7R) should be done before being positioned by INEO. These tests should not take more than a few hours and are to be coordinated with Antonio Vergara and Ivan Moya.
- Davide Bozzini will do the tests ELQA-TP3 in the DFBAN on Tuesday. This needs to be coordinated together with INEO since they will be working in that DFB. John Etheridge should approve the procedures.

## 3. Other issues:

- Francois Millet reminded that insulation vacuum is kept once the leak tests are finished, and therefore either the sub-sectors are under pressure or under vacuum. Everyone should keep this in mind.
- The procedure for the HV tests of the cabling to cryo instrumentation remains to be reviewed by J.Etheridge.
- Alain Gharib confirmed that the functional tests on the heater current leads could already start this week, since they are ready and they do not disturb other activities.
- Alain Gharib and Pascal Chambouvet pointed out that due to a lack of manpower (AT-VAC ?) and lack of pumping groups, it will be difficult to start the current lead pumping week 48. The activity should last for more than the 1 week initially allocated for this activity in the planning.

## Open Issues

---

- 13.11.06 Cryo. valves manipulation on the DFBMH, DFBAN and DFBAO
- 13.11.06 Hydarulic connection of the current leads
- 13.11.06 Non-conformity of the mini-crates of cryo instrumentation

- 13.11.06 Cabling non-conformity affecting QPS and 60A Orbit Correctors IST
- 13.11.06 WRL DFBAO missing support LSS8L
- 13.11.06 3 x 600 A power cable positioning LSS8L
- 13.11.06 BPM connection in Q2, Q2, Q4, Q5, Q6, Q7
- 13.11.06 DFBX AT/MEL Transformers installation
- 13.11.06 EIQA-TP4-A in the DFBAO
- 13.11.06 LSS8L Q6-Q7 bake-out
- 13.11.06 120 A Cables connection in DFBMC, DFBMA and DFBX LSS8L
- 13.11.06 6 kA cables positioning at DFBMA and DFBMC
- 13.11.06 Quench protection continuity tests and cables assignment LLS7R (DFBMH, DFBAN) and LSS8L (DFBMC, DFBMA and DFBX)
- 13.11.06 DS7R and DS8L leak test
- 13.11.06 Leak in R7
- 13.11.06 WRL connection DFBMH LSS7R
- 13.11.06 ELQA-TP3 test of the sector 78
- 13.11.06 Polarity tests of the 600A and 120A cables for DFBAN and DFBMH (LSS7R)
- 13.11.06 Current lead vacuum: men power and pumping groups availability

### Closed Issues

---

Galvanic Insulation 600 A, 6 kA, 13 kA for LSS8L and LSS7R available	10.11.06
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
Week 47	Short Circuit tests 60 A started
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**

**Tuesday, November 14th 8:30 @ P8 2889-R-009**

Blanca Perea Solano