

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

HARDWARE COMMISSIONING COORDINATION - WEEK 47

22 November 2006 8:30 2889-R-009

Present: P.Chambouvet, P.Cruikshank, M.Coccoli, D.Bozzini, S.Junker, F.Millet, B.Perea Solano, R.Saban.

### **Preparation of the Cool-Down in Sector 78**

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AC cabling non-conformity:

- A.Suraci informed of non-conformities (short to ground) in cryo-instrumentation cables (current lead temperature sensors). More details about the consequences will be discussed at tomorrow's RAT.

Instrumentation cabling:

- A.Suraci informed via email and telephone that the work on the 6 kA and 13 kA of the DFBAO is ongoing today. This work will continue tomorrow.
- D.Bozzini informed that the DFBAO 600A cables are not labelled.

Vacuum:

- Pressure test foreseen for Friday. The tunnel from RR73 to UJ87 will be not accessible from 13:00. The tests will start at 14:00.

Cryogenics: -

DFB Commissioning:

- P.Chambouvet informed that the pumping of the current lead insulation vacuum in DFBMH is finished and that today the pumping in DFBAN will begin.

Safety:

- R.Saban informed that the short-circuit test in LSS7L is postponed by 2 weeks to avoid interference with the first part of the cool-down of sector 78.
- R.Saban reminded that the monorail is *consigné* in this moment and it will be *deconsigné* tomorrow afternoon at 16:00 (LSS8L) - 16:45 (LSS7R). Also, he stressed the point that a *consignation* has to be requested to perform activities on DFBX (or other activities in height and therefore near the monorail) and that at the end of the activity the *deconsignation* has to be requested again.

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

AOB: -

## Open Issues

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### AC non-conformity

- 21.11.06 Transport and installation of the heater system of the current leads for RR77 and UA83
- 21.11.06 Non-conformity on instrumentation cables (temperature sensors on current leads)
- 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.

### DC cabling

- 13.11.06 Non-conformity of the DC cabling of the orbit corrector power converters
- 13.11.06 6 kA and 13 kA cables positioning at DFBAO, DFBMA and DFBMC
- 20.11.06 Galvanic insulation installation of 600 A cables to the DFBAO
- 22.11.06 Pre-connection of 120A cables in LSSR7
- 22.11.06 Missing labels on DFBAO instrumentation cables

### Assembly

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### Vacuum

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### Cryogenics

- 22.11.06 Cryo-valves remote control in CCC by AB/CO
- 22.11.06 Control of quench valve
- 20.11.06 DFB instrumentation cables to be connected
- 17.11.06 Instrumentation cable HV tests in LSS8L

### 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 DFBAN, DFBAO, DFBMC, DFBMA, DFBXG

### 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)

### Preparation of powering test

- 22.11.06 Pretest of 60A converters in sector 78, location C16L8.

- 22.11.06 Installation of flexible cables by CV (UA83)
- 16.11.06 Water circulating in UA83 for the Powering Procedure Test: filters need to be checked.

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**

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Leaks on DFBAO gas recovery line in repair/installation of helicoflex	22.11.06
21 leak detectors to be placed all along the arc 78	22.11.06
Connections (made by TS/MME) of 120 A cables to be verified (TS/EL)	22.11.06
600 A cable positioning on DFBAO	22.11.06
Pumping of insulation vacuum DFBMH	21.11.06
Pressurized air supply to valve on WRL	21.11.06
Support on DFBAO WRL	21.11.06
Bellows in Q6-Q7 LSS8L which had been damaged, is now repaired	20.11.06
Valve on the WRL is operational	20.11.06
Leak in arc Q11-8L	20.11.06
Cryogenic valve manipulation on DFBX	20.11.06
Removal of some BLMs in conflict with the pumping groups	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**

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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**

**Tuesday, November 23rd 8:30 @ P8 2889-R-009**

Mirco Coccoli