

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

HARDWARE COMMISSIONING COORDINATION - WEEK 47

21 Novembre 2006 8 :30 2889-R-009

Present: E.Barbero, B.Bellesia, P.Chambouvet, P.Cruikshank, M.Coccoli, J.C.Guillaume, S.Junker, , F.Millet, B.Perea Solano, M.Pojer, A.Poncet, R.Saban, A.Suraci, A.Vergara.

Preparation of the Cool-Down in Sector 78

AC cabling non-conformity:

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

Instrumentation cabling:

- A. Suraci informed that the cryo-instrumentation cables connection will take 0.5 days for each DFB.
- A. Suraci will work on the 6 kA and 13 kA of the DFBAO today and tomorrow 22 Nov morning; Flohe will start working tomorrow afternoon. A.Vergara informed that the positioning of the cables will take 1 week for DFBAO and 3 days for DFBMs and this will be updated in the planning.

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.
- Paul described the status of leak tests (with the support of the summary table in the appendix of these minutes).
 - The table represents the leak tests situation in Sect.78.
 - At least one leak was found on each sub-sector (exception made for the last two tested with 2 leaks).
 - Some leaks have been repaired and some will be "used-as-is", i.e. the proposal is to repair them after the pressure tests and before the Cool-Down without interfering with the flushing activity.
 - As of today, 4 leaks need to be repaired.

Cryogenics:

- The support for WRL on DFBAO was installed yesterday (Ivo Slits).
- Pascal Chambouvet clarifies that the leak mentioned in the last minutes (found during the leak tests of Saturday 18 Nov) is not on the DFBAO current leads but in the helicoflex gaskets to the gas recovery line: they were missing.

DFB Commissioning:

- Pascal Chambouvet informed that the pumping of the current lead insulation vacuum in DFBMH is finished and that today the pumping in DFBAN will begin.
- Current leads racks in UA83 will be installed tomorrow. The current leads racks for RR77 are being transported (A. Funken).

Safety: -

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

AOB: -

Open Issues

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 (LT, PT, Level Gauges, ...)
- 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
- 17.11.06 600 A cable positioning on DFBA
- 20.11.06 Connections (made by TS/MME) of 120 A cables to be verified (TS/EL)
- 20.11.06 Connections of 600 A cables to the DFBAO to be verified

Assembly

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Vacuum

- 20.11.06 21 leak detectors to be placed all along the arc 78

Cryogenics

- 20.11.06 DFB instrumentation cables to be connected
- 20.11.06 Leaks on DFBAO gas recovery line in repair/installation of helicoflex
- 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, DF BMC, DF BMA, DF BXG

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

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, DF BAN) and LSS8L (DF BMC, DF BMA and DF BX)

Closed Issues

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 DF BX	20.11.06
Removal of some BLMs in conflict with the pumping groups	17.11.06
120 A Cables connection in DFBAO, DF BMC, DF BMA and DF BX 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
DF BX AT/MEL Transformers installation	14.11.06
WRL connection DF BMH LSS7R	14.11.06
ELQA-TP3 test of the sector 78	14.11.06
Polarity tests of the 600A and 120A cables for DF BAN and DF BMH (LSS7R)	14.11.06
QUI available	10.11.06
Pressure tests of QUI and DF Bs safety valves finished	10.11.06

QRL valves available for all sector	09.11.06
QRL valve opening/cablings 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

Tuesday, November 22nd 8:30 @ P8 2889-R-009

Mirco Coccoli

