

RAT Réunion Avancement Travaux

HARDWARE COMMISSIONING COORDINATION

February 12, 2007, 8:30 at Point 7

Present: Baptiste Lebeau, Jean-Pierre Malod-Dognin, David Nisbet, Mirko Pojer, Jacques Toullieux

SCT in UA67 and UJ67

➤ AC:

- AUG test was performed on Friday (09.02); affected areas: LSSR5-A56-LSS6-A67-LSS7L. The results of the test may be summarized as follows:
 - before the test: RQD could not start due to a water fault; a 'bouchon' was used to inhibit the "Cable Water fault" to allow the switch to be closed (only low current during the test);
 - after the AUG: water pumps did not restart immediately after; all converters on the UPS functioned correctly; a PM event was correctly recorded for each converter system; for the 600A with EE, the RQTF.R6B2 switch requires 3 tries before the switch closes (it may happen from time to time); PM from the EE was produced but it got stacked.
 - ◆ Almost all systems (RQTF excluded) restarted correctly.
 - ◆ All converter systems functioned normally.
 - ◆ From PIC everything was OK.

DC cables:

- ~~Rack RYLC03 not labeled by TS-EL. Checked OK~~

➤ Power converters:

- ~~Further tests on RB (Active Filter): today and tomorrow (09.02) morning. Test FINISHED. Active filter ready to be used if necessary.~~
- ~~Polarity Checks will be finished tomorrow (08.02). COMPLETED (few labels still missing).~~

➤ PIC and CCC:

- RSF2.A67B1 and RSF2.A67B2 PIC cables extension: will be done in a campaign in 2-3 weeks time.

➤ Cooling and Ventilation:

- ~~Elettas calibration on RB and RQ10: today (08.02): DONE~~

➤ WIFI: -

➤ WorldFIP: -

➤ Energy Extraction: -

Open Issues

12.02 PM generated but stacked in local
12.02 Few labels missing for cables identification
05.02 Little ducts between UA and RA not closed during the 24hr
02.02 RSF2.A67B1 and RSF2.A67B2 PIC cables to extend
02.02 NC opening on the bad connection on the 6kA racks
08.01 EE fan rotation problem – all ring

Heat Runs and Test Schedule

08.01 ~~600A and 13 kA EE system IST.~~
08.01 ~~RB IST. ON GOING~~
11.01 ~~120A powering tests.~~
15.01 ~~2 kA powering tests.~~
15.01 ~~600A powering tests.~~
17.01 ~~600A EE powering tests.~~
22.01 ~~PIC-PC-QPS Interface tests.~~
23.01 ~~RQD&F powering tests.~~
24.01 ~~RB powering tests.~~
25.01 ~~CCC tests for preparing 8hr run~~
26.01 ~~120A-600A-2kA 8h heat run.~~
30.01 ~~RQD/F-RB 8h heat run.~~
05.02 ~~24h heat run test.~~
07.02 ~~Polarity test.~~
09.02 ~~AUG&UPS.~~

Closed Issues

12.02	Open duct on tunnel side (600 A)	12.02
05.02	Rack RYLC03 not labeled by TS-EL.	12.02
29.01	Slightly higher resistance of a conical junction	02.02
31.01	too high cable connection temp. of RQ8/9 during 8hr run	02.02
21.12	Aluminum panel for the cables ducts/ shipping and install.	02.02
31.01	Identified cause: too high water temp. during 8hr run	02.02
26.01	Dirty filters to be cleaned in the 13kA water cooled cables	29.01
29.01	Minor problems in the monitoring system of the EE	29.01
10.01	QPS racks connection	29.01
24.01	Eletta in RQ4 to be repaired	25.01
17.01	Broken thermostat on 13 kA EE	25.01
19.01	HV Insulation test of the DQS poles	21.12
19.01	Cleaning of filters by CV (planned for 17.01)	12.01
19.01	Power cut in ERD-R13	12.01
17.01	Loosen bolts on RCBYH4.R6B1 and RCBYV4.R6B2 PCs.	15.01
12.01	Water circuit in RR73 (next SCT)	10.01
10.01	Problem with the CYNET03	08.01
10.01	Database update for ECR LHC-RPH-EC-0001	12.01
18.12	PC powering	10.01
18.12	Cooling station test by Roesse	10.01

18.12	ERD rack powering	09.01
18.12	Elettas calibration	08.01
18.12	Ventilation station	08.01
21.12	HV Insulation test of the DQS poles	08.01
18.12	EOD rack powering	23.12
18.12	Cleaning of the areas	21.12
18.12	Water circulation	21.12
18.12	HV test with circulating water	21.12
18.12	Water-cooled cables supports	21.12
18.12	WorldFip cabling for PO	21.12
18.12	CYNET01 and CYNET02 powering	21.12
18.12	Connection of cable extremities on DQS	21.12
18.12	Electrical protection IP2 on LEMs	21.12



PREPARATION SCT in RR73 and UJ76

- ACCESS Information:
 - Access free to UJ76 and RR73.
 - Access to the LSSR7 and RR77 ONLY with LHCCOOL CARD.
- AC:
 - ERD1 transformer in RR73: already 'sous tension'; equipments will be connected today (12.02).
- DC cables
 - Baptise started the cabling of the UJ76.
 - In RR73 a LEM (600 A) was reversed; the change has already been done, but the cables have to be tightened.
 - ~~Jean-Claude will finish by midday (08.02) the positioning of the cable for the fire detection system.~~ COMPLETED
- Power converters:
 - The modules will be put in place on Monday (12.02) morning and ready to be test in the afternoon.
- PIC and CCC:
 - ~~PIC cabling in RR73 will be checked today (08.02).~~ OK, ready for the interface test on Thursday (15.02).
- Cooling and Ventilation:
 - ~~Today (08.02): 1st water cooling circuit filter check – RR73.~~ OK
 - Wednesday (14.02): Full power ventilation test
 - Friday (16.02): 2nd water cooling circuit filter check – UJ76.
 - Friday (16.02): Elettas calibration in collaboration with TS/EL.

- WIFI:
 - Temporary Installation in place (08.02). TS-EL must cable the zone.
- WorldFIP:
 - Several damaged connectors replaced.
 - Due to access restrictions from point 6 to the working area, delays have been accumulated; schedule:
 - ~~PO segments ready Thursday 8 at 12:00 AM.~~ OK
 - QPS segments: ready Friday 9 at 12:00 AM. Connections for system qualification already in place. Qualification to be done by Friday (16.02) to start the test on Monday (19.02).
- Energy Extraction:
 - ~~The WorldFip loops must be installed by the QPS team on their segment.~~ DONE
 - The 2 13kA-2000 mm²-water cooled cables have been discovered inverted (they are turning when crossing the floor). A re-positioning has to be done by TS/EL.
 - On Tuesday (13.02) the systems will be ready for the switch test.
- Fire detection: system working; the reception is planned for tomorrow morning (13.02).
- Cleaning: ~~today (02.02) in RR73~~; Friday (19.02) in UJ76
- Balisage: it will be put in place today (12.02)
- AOB: ODH installation in UJ76 has been checked, while the one in RR73 will continue in the next days (transparent for the other activities).

Open Issues

12.02	LEM reversed: cables to be tightened
08.02	Fire detection system completed. Reception to be done
08.02	Temporary WIFI cable to be replaced by TS/EL
08.02	13kA-2000 mm ² -water cooled cables reversed in the tunnel



Heat Runs and Test Schedule

07.02	Water circuit filters cleaning in RR73
12.02	ERD1 powering, FGCs configuration and first tests in RR73
13.02	120A (RR73) powering tests
14.02	600A (RR73) powering tests
14.02	Full power ventilation test
15.02	600A-EE interlock and powering tests
15.02	600A-EE interlock tests
16.02	Water circuit filters cleaning in UJ76

19.02 8h heat run for 120A&600A in RR73
20.02 600A (UJ76) powering tests
23.02 8h heat run for 600A in UJ76
26.02 PIC interface test
26.02 Water circuit filters cleaning in RR73/UJ76
27.02 CCC test for 24h run
28.02 24h heat run test
01.03 Electrical services-Inom-Imax
01.03 EE-QPS test at Imax
01.03 AUG&UPS.
05.03 Polarity test

**Wednesday February 14
RAT meeting
8:30 at Point 7**

Boris&Mirko