

## **RAT** Réunion Avancement Travaux

### HARDWARE COMMISSIONING COORDINATION

December 11, 2006, 8:30 in CCC

Present: Carlos Castillo Trello, Knud Dahlerup-Petersen, Julien Kis, Robin Lauckner, Jean-Pierre Malod-Dognin, David Nisbet, Mirko Pojer, Ronaldus Suykerbuyk, Hugues Thiesen, Jacques Toullieux.

### **SCT in RR57 and UJ56**

---

---

➤ Cables DC:

- After the over-heating of the 600 A cables on the tray during the 8h heat run test, those cables have been re-distributed to improve their ventilation. The re-distribution has been carried on in both areas (UJ56 and RR57).

➤ Fire detection system:

- Raymond Cambarrat has confirmed by e-mail on Friday 8 the good result of the test of fire detection and the provisional acceptance of the system, as follows:

Bonjour,  
Nous avons procédé, cet après-midi, aux tests règlementaires des détections incendies dans les locaux susmentionnés. Les alarmes filaires sont parvenues sur les écrans des salles de contrôle CCC et SCR dans les délais règlementaires. Nous avons accepté l'installation provisoirement en l'état actuel, dans l'attente de driver permettant de bien identifier les capteurs en alarme. Les rapports avec les plans de localisation suivent par courrier interne Cordialement raymond

Raymond Cambarrat  
Safety Commission  
Cern

➤ Cooling and ventilation:

- The full power ventilation test was successfully executed on Friday, 8. Green light has been given for the 24h heat run test.

➤ UPS and AUG tests:

- Agreement has been found on the possibility of performing the two tests in the same day (NOT at the same moment!!!), namely Wednesday, 13. Knud has underlined that the stop of the pumps is also a necessary requirement for the AUG.

- Half a day has been scheduled for the test of the new sequencer, on Friday, 15.

### **24h heat run test**

The 24h heat run test has been started around 10.10, later than expected, because of access problems to the electrical distribution room in UJ56, as already experienced and reported during the 8h heat run.

All the power converters have been ramped successfully.

During the next 24 hours the following contacts will be available for the different systems:

Hardware commissioning coordination:                      Mirko Pojer                      162482

#### Power converters :

Responsable ABPO: David Nisbet    164223

(en cas de absence) Hugues Thiesen    164205

Numéro général ABPO-LHC-SCT-24H:    162333

Permanences ABPO:

Journée 8h a 18 heures 11-12-2006 : Emmanuel Garde (16 4035) / Philippe Marchon

Journée 18h a 20 heures 11-12-2006 : David Nisbet (164223) / Jeff Thomsen (165008)

Nuit 20h 11-12-2006 a 2h00 12-12-2006 : Okbi Zenasni tel (16 3678)

Nuit 2h a 8h 12-12-2006 : Cédric Caffier tel (16 4133)

Journée 8h a 17 h 12-12-2006 : Emmanuel Garde (16 4035) / Philippe Marchon

Energy extraction system:                      Knud Dahlerup-Petersen                      163279

DC cables: J. Kis (10h-18h), B. Lebeau (18h-00h), S. Cotte (00h-7h), J. Kis (7h-end of test)    164879

### **Open Issues**

---

- 01.12                      Short cables on 13 kA EE to be changed later on (temporary solution in place)
- 06.12                      Permanent labels for RQ converters in RR57 (according to ECR)
- 07.12                      Access key to electrical distribution room in UJ56

## Heat Runs and Test Schedule

---

01.12	<del>Squeeze test</del> DONE (all the power converters involved have been tested)
06.12	<del>8-h heat run</del> DONE
07.12	<del>Fire detection test</del> DONE
08.12	<del>Full power ventilation tests in RR57 from 8:30 till 12:00</del> DONE
08.12	Afternoon: Polarity Test_1 <sup>st</sup> part TO BE RE-SCHEDULED
11.12	10am: 24-h heat run
13.12	UPS test and Electric cut (AUG simulation).
13.12	Polarity Test_2 <sup>nd</sup> part TO BE RE-SCHEDULED
14.12	13kA energy extraction test.
15.12	New sequencer test

## Closed Issues

---

07.12	Cables re-distribution for 600 A	11.12
22.11	Fire detection – awaiting certification	11.12
23.11	Ripples in RQT12R5B1 power converter.	05.12
29.11	ELETTAS threshold setup	01.12
29.11	WIFI problems	01.12
20.11	Problem with water conductivity in DQS	29.11
23.11	Cables inversion on rack RYMCA04	29.11
13.11	Test de circulation ED (waiting UJ56)	29.11
13.11	DC cables high voltage test	29.11
22.11	DQS acousting shielding and cabling	27.11
22.11	Wi-Fi damaged cable has to be repaired	27.11
13.11	Ventilation in UJ56	27.11
19.11	Eletta tests RR57	22.11
13.11	High Voltage tests with and without water RR57	22.11
13.11	Balisage	22.11
13.11	Calibration rack connection	20.11
13.11	Elettas test. Done	20.11
13.11	13kA EE shielding.	16.11
13.11	Elettas Installation. Done	15.11
13.11	Detailed schedule SCT. Ready.	15.11
13.11	Fire Detection in the area. Ok.	15.11



## Dry-Run in UA83 and RR77

---

---

CV informs that operations in UA83 needed for the Powering Procedure Test (dry-run) have already been started (some flexibles have to be connected and filters checked). It is important to know that water can circulate in the area apart the water-cooled cables, where operations are on going.



**Proposal of Short Circuit test inversion between RR73/UJ76 and  
UA67/UJ67**

---

The inversion of the point is confirmed. Test will start on second week of January (first working week!).



**Next RAT meeting,  
Tuesday December 12  
8:30 in CCC.**

Mirko

ANNEX 1 \_ Changes in power converter notation, in agreement with the Engineering Change Request (EDMS No. 804188)

OBJECT_ID	OLD PC NAME		RACK LOCATION	NEW PC NAME	OLD ERD	NEW ERD	OLD UPS	NEW UPS	PIC CABLE	EOD LABELS OK	ERD LABELS OK	FINAL PC LABEL OK	OLD FIP ADDRESS	NEW FIP ADDRESS	DC EARTH CHECKED	INTERLOCK CABLE INVERSED	CONVERTER POSITION (U = UPPER, L = LOWER)	REMOTE RESET OK
321110	<u>RPHGA.RR57.RQ7.R5B1</u>	<u>RPHGA</u>	RR57	<u>RPHGA.RR57.RQ7.R5B2</u>	106	107	105	105	OK	OK	OK		13	6	OK	OK	L	OK
321111	<u>RPHGA.RR57.RQ7.R5B2</u>	<u>RPHGA</u>	RR57	<u>RPHGA.RR57.RQ7.R5B1</u>	107	106	105	105	OK	OK	OK		6	13	OK	OK	U	OK
321156	<u>RPHGA.RR57.RQ9.R5B1</u>	<u>RPHGA</u>	RR57	<u>RPHGA.RR57.RQ9.R5B2</u>	110	111	105	105	OK	OK	OK		15	8	OK	OK	L	OK
321157	<u>RPHGA.RR57.RQ9.R5B2</u>	<u>RPHGA</u>	RR57	<u>RPHGA.RR57.RQ9.R5B1</u>	111	110	105	105	OK	OK	OK		8	15	OK	OK	U	OK
321077	<u>RPHGB.RR57.RQ5.R5B1</u>	<u>RPHGB</u>	RR57	<u>RPHGB.RR57.RQ5.R5B2</u>	103	102	104	104	OK	OK	OK		18	19	OK	OK	L	OK
321078	<u>RPHGB.RR57.RQ5.R5B2</u>	<u>RPHGB</u>	RR57	<u>RPHGB.RR57.RQ5.R5B1</u>	102	103	104	104	OK	OK	OK		19	18	OK	OK	U	OK
321184	<u>RPHH.RR57.RQ4.R5B1</u>	<u>RPHH</u>	RR57	<u>RPHH.RR57.RQ4.R5B2</u>	115	116	104	104	OK	OK	OK		12	5	OK	OK	U	OK
321185	<u>RPHH.RR57.RQ4.R5B2</u>	<u>RPHH</u>	RR57	<u>RPHH.RR57.RQ4.R5B1</u>	116	115	104	104	OK	OK	OK		5	12	OK	OK	L	OK
	<u>RPHGB.RR57.RQ6.R5B1</u>	<u>RPHGB</u>	RR57	NA											OK		L	
	<u>RPHGB.RR57.RQ6.R5B2</u>	<u>RPHGB</u>	RR57	NA											OK		U	
	<u>RPHGA.RR57.RQ8.R5B1</u>	<u>RPHGA</u>	RR57	NA											OK		L	
	<u>RPHGA.RR57.RQ8.R5B2</u>	<u>RPHGA</u>	RR57	NA											OK		U	
	<u>RPHGA.RR57.RQ10.R5B1</u>	<u>RPHGA</u>	RR57	NA											OK		L	
	<u>RPHGA.RR57.RQ10.R5B2</u>	<u>RPHGA</u>	RR57	NA											OK		U	

	qty
RPHH	2
RPHGA	4
RPHGB	2