

21 May 2007 08:30 in 2889-R-009

Present: AB/CO: M. Zerlauth, R. Schmidt, A. Castañeda
AB/PO: H. Thiesen, Y. Thurel, V. Montabonnet
AB/OP: V. Kain
AT/MEL: S. Feher, G. Kirby, B. Flora, K-H. Mess, A. Ballarino, S. Le Naur, D. Bozzini, R. Denz
AT/MTM: A. Siemko, G. D'Angelo, S. Sanfilippo
AT/ACR: R. Rabehl
TS/HDO: R. Saban, M. Pojer, B. Perea-Solano M. Koratzinos, A. Vergara

Powering Tests - Sector 78

- Last Friday (18/05) RQ5.L8 was tested up to PLI2.4. This includes a forced quench (simulating a quench signal from the current lead quench detector) at I_INTERM_1 which was moved from 900A to 1kA. A first analysis of the post-mortem data show a correct performance of the different systems.
- The issue with the quench detector trips was solved. Some spikes were seen at the quench detection voltage above the quench threshold (set at 20mV), however, such spikes were not long enough to trigger the quench signal (quench validation time: 10ms). In order to avoid those spikes, the ramp rate was lowered from 13 A/s to 10 A/s. It has been decided to use 5 A/s for future Q5 commissioning. The value will be implemented in the controls database.
- After triggering the quench, the helium level in the magnet cryostat decreased in a short time (minutes) to zero, and increased in about the same time to the nominal value. No change of temperature and pressure were observed. Roberto asks confirmation of the performance from CPP.
- De-coupling of the two power converters of RQ5 was successfully tested.
- Also on Friday the boiling-off of the DFBMA and the DFMAC was carried out. AT/MEL measured the voltage variation along the 120A circuits with respect to the liquid level in the DFB. Measurements were taken following a cycle of 17 cm (DFB full) – 12 cm – 7 cm – 0 cm (DFB empty) – 17 cm. Changes were in the order of hundreds of micro-Volt with an injected current of 5A. The data is still being analysed since the measurements were taken on Friday evening.
- Today, while waiting for recovery of 1.9K in the arc cryostat, the commissioning of the circuits in the powering subsector ML8 will continue. MPP gives OK to power RQ5.L8 up to its nominal

current and follow with RQ4.L9 and RD2.L8. In parallel the 120A circuits will be also commissioned. Antonio reminds that this parallelism will cause several interruptions in the corrector tests, which will require the intervention of Mr. Circuit to unlock the circuits whose tests have been interrupted.

- Next meeting Tuesday, 22nd of May at 8:30 in 2889-R-009

Antonio Vergara

Open Hardware Commissioning Issues in SECTOR 78

REGION	ISSUE
SECTOR 78	
	QPS voltage tap problem in quadrupole 33R7 - Another tap will be used instead. Attention because the damaged tap might be floating on the conductor.
	Non-conformity of the crates of cryo instrumentation (inrush current) (A.Suraci)
	Securing of the ventilation units
	Four circuits in Q5 suffer a breakdown at around 450V due to a weak insulation. The four circuits are RCBCVS5.L8B1, RCBCHS5.L8B2, RCBCHS5.L8B1 and RCBCVS5.L8B2. Insulation towards ground and other circuits is OK.
	EI_QA performed on C16L8. ICC test showed reversed sequence of V-taps on circuit RCBV16.L8B1 (D.Bozzini) check
	BPM connection in Q2 (R.Jones) ? waiting for Inner Triplet to be repaired
	MB1055 magnet to be changed before powering above 2kA RB.A78
	Inner Triplet in Point 8 to be repaired
	Failure of supports (red jacks) of D2-Q4 in L8 - temporary repair in place. EDMS document "Major movements of the D2-Q4 magnets and supports in 8L" https://edms.cern.ch/document/833365/1
	Water leak on the tunnel concrete wall to be fixed (C33L8).

Closed hardware commissioning issues in sector 78 can be found at <http://hcc.web.cern.ch/hcc/activities/activities.php?region=S78>.