Powering Tests - Sector 78

Afternoon meeting (16:30 in CCC)

- **D2:** the magnet was ramped to nominal current (6000A) and, after a plateau of 5 minutes, ramped down without any problem; the individual commissioning for this magnet is finished.

- **Q4:** the magnet was ramped to nominal current (3610A) on the B1 aperture, and to 2000A on the B2 aperture. B1 power converter tripped (event similar to the one of last week). When the engineer of PO tried to recover the PC, an elevated voltage signal which triggered a quench was generated. Later during the day the electronics control unit of the PC was exchanged with a spare one. After recovering the CRYO condition, the magnet was ramped again to perform the same unbalanced cycle. When B1 aperture was at nominal current (3610A) and the B2 one was ramping up (3590A), the latter quenched. The QPS worked well, an e-logbook for the QPS system commissioning has been created.

- **ELQA:** Transfer function measurements (impedance of the circuit, and circuit vs. ground) have been performed on 600 A circuits powered via the DFBAO. All are OK except the RQT12.L8B1 that has revealed a short to ground (around 40 ohms). Quick diagnostic has revealed that the short is on the 'cryogenic instrumentation' side. The short disappears when the cable routing TT signals towards the electronics is disconnected. Cable ID is 1818529A (connected to C50-4 on DFBAO proximity equipment).

- **QPS system for the arc:** good progress. Reiner will prepare the main circuit with priority, plus some 600A circuits.
The High voltage tests of the cryo-cables started from point 8 this morning and continued in point 7 this afternoon.

Cryogenics: boil off tests of DFBMH tonight. These tests will be continued next evenings, after the ELQA tests are finished.

Next RAT meeting Wednesday, 30th of May at 8:30 in Point 8.

M.Solfaroli