

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

Present: AB/CO: M. Zerlauth, R. Schmidt, A. Castañeda, A. Rijllart  
AB/PO: V. Montabonnet, A. Cantone  
AB/OP: E. Veyrunes, L. Ponce  
AT/MEL: S. Feher, G. Kirby, K-H. Mess, A. Ballarino, V.  
Chareyre, R. Denz, P. Chambouvet, K. Dahlerup-  
Petersen, B. Flora  
AT/MTM: G. D'Angelo, S. Sanfilippo  
AT/ACR: L. Ronayette  
TS/HDO: R. Saban, M. Pojer, A. Vergara  
E. Michel

### Powering Tests - Sector 78

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- Yesterday (23/05) RQ5.L8 was successfully powered up to nominal current (4310 A). The sequence of events was:
  - ramp to nominal (4310 A) with 5 A/s ramp rate: quenched occurred at 4210 A on B2 aperture; Sandor confirms that this was a training quench;
  - ramp to nominal (4310 A) with 5 A/s ramp rate: NO quench; a plateau of 10 min was maintained for possible voltage drift recording; during the time at this current plateau a voltage drift of around 20 mV was developed in the current leads. Amalia explains that such resistance development was expected and could reach up to 40 mV till the cooling stabilises it. The noise at the quench detector during the ramp stays between +/- 5 mV, good enough for the tight detection threshold set.
  - keeping B1 power converter at nominal current, B2 power converter was lowered to 55% of the nominal current (2370 A); with this unbalanced configuration, a quench was driven by QPS generating an artificial quench signal from one current lead detector; test was successful;
  - ramp to nominal (4310 A) with 5 A/s ramp rate: NO quench; a FPA was provoked from power converter, that made the quench detector trigger and fire the heaters: Test Failed. Sandor explains that this spurious trigger of the quench detector (the FPA should be transparent to the QPS) is not due to the noise generated by the large ramp rate (around 70 A/s) but to the unbalance between both

converters (2.2%) generated when the reference current for both converters drops to zero. This is good news since that effect can be compensated at the level of the quench detector.

- Today (24/05) we will continue powering for RQ4.L8 and RD2.L8 from the CCC. The latter still has to go through PIC2.
- In parallel with the powering, works towards powering of the 13 kA circuits and some selected 600A correctors will start today:
  - Plastic bags on the 600A current leads
  - IST of QPS for which 1.9 K is not required

Once 1.9 K conditions are reached:

- EIQA at 1.9K for the three 13 kA circuits and some selected 600A correctors (list of circuits will be provided today by HCC)
  - IST for QPS at 1.9 K
  - OK from QPS, EE, PIC and current leads.
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- From Wednesday, if every thing goes fine, we will start working in two shifts.
  - Next meeting Friday, 25<sup>th</sup> of May at 8:30 in 2e889-R-009

Antonio Vergara