Powering Tests - Sector 78

- Cryo status: Ok at the beginning of the morning. F. Millet explained that yesterday (31/05) after the ELQA in RB, the temperature increased up to the $\lambda$ point in one cell.

- B. Flora presented the analysis on the triple quench occurred yesterday during the powering to nominal cycle of D2, Q4 and Q5. It was clarified the following:
  
  - D2 quenched first, the fast power abort is sent to the power converters of Q4 and Q5.
  - While ramping down, in Q5 the $\Delta V$ exceeds the reduced detection threshold of 20mV and the QPS triggers a quench in the magnet.
  - There is heat propagation from D2 to Q4 which makes finally the latter quench.
  - Amalia highlights that the quench in D2 was not in the HTS lead. (The threshold of 3mV was not reached)

- ML8 is blocked by MPP until the quench in D2, Q5, Q4 is fully understood.

- ELQA: (Vicent Chareyre)
  
  - Carried out yesterday:
    - RQF and RQD ok
    - RB: First breakdown in the line A at 1.7 kV
RB: Second break down at 300 V in line A after disconnecting the cryo-instrumentation disconnected.

RB: First partial discharge at 1.5 kV. (After that, the temperature in one cell went up of the \( \lambda \) point)

RB: After recovering cryo conditions, the test was repeated in line B with the same result, after having disconnected the DC cables, the QPS instrumentation, the cryo electronics, and turned off the current leads heaters (consequently the leads frozen)

- Today:
  - ELQA on the DFBMH as soon the insulation plugs are fixed or restored.
  - ELQA in the 600 A circuits according to the programme as soon as the insulation plugs are fixed or restored. (Cryo conditions in the arc were lost after the meeting, therefore cancelled)
  - Repeat the ELQA in both lines A and B of RB with everything disconnected. Amalia clarifies that it can be done with room temperature in the bottom of the leads. (Cryo conditions in the arc were lost after the meeting, therefore cancelled)

- Mirko informs that yesterday the dew point in S7-8 was within specifications

- Daniel Perrin informs that a campaign of tests on the Ramses system has been foreseen with planning in sector 7-8 for next week. It will be taken in account in the list of activities to coordinate in the RAT meetings at point 8.

- MPP Report on the quenches experienced on Monday (21/05):
  - RQ5.L8 – Quench at 3941A. The quench is clearly a training quench. Some more should be expected (up to 5) before reaching nominal current. All the systems performed well. Powering should continue today.
  - RQ4.L8 – Quench at 310A. It has not been totally understood yet the reason of the quench. MPP will continue looking at it. In the meantime, Reiner will update the software of the detector and controller in order to improve the data sent to the post-mortem system.

- Next meeting Monday, 4\textsuperscript{th} of June at 8:30 in 2889-R-009

Maria Paz Casas