

30 April 2007 08:30 in 2889-R-009

Present: AB/CO: M. Koratzinos, R. Schmidt, M. Zerlauth,  
A. Castaneda  
AB/PO: V. Montabonnet  
AB/OP: G-H. Hemelsoet, M. Albert  
AT/MCS: M. Modena  
AT/MEL: D. Bozzini, S. Feher, G. Kirby, A. Ballarino  
AT/MTM: A. Siemko, S. Sanfilippo  
AT/ACR: F. Millet, R. Rabehl  
TS/HDO: R. Saban, A. Vergara, B. Perea

## Sector 78

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- F. Millet reported on what happened with cryogenics since the last meeting: on Friday morning the faulty relay was changed and pumping at 15mbar was re-established. On Friday 18:00 there was a stop due to a water cooling problem. By Saturday morning at 2 am conditions were restored, pumping at 15mbar. The pumping group however stopped around 5 am presenting the same frequency driver problem that has hampered operations two weeks ago. Since then we are in cold stand-by mode. R. Schmidt asked if the switchover to the other cryo plant (envisaged for Wednesday) could be moved forward.
- F. Millet also reported on a loss of communication that happened on Friday afternoon. At 15:00, 80% of all PLCs were lost due to a defective Ethernet star point (close to the Cryo control room in P8). The offending network hardware was fixed by IT and by 18:00 communication was re-established. Two temperature sensors failed after the incident giving strange readings. They will be checked this morning.
- F. Millet noted that if such an incident occurred during normal operation, CRYO\_START and CRYO\_MAINTAIN would have been lost, forcing systems to switch off without endangering equipment. Both signals are updated every 30 seconds and any loss of communications would have been observed with the same time delay.
- During the period of loss of communication, the valves of the He escape of the current leads opened up (about 20%) and as a result, the corresponding current lead temperature dropped and current leads frosted up.
- A. Ballarino noted that very low temperature should be avoided at the top of the chimneys, as it might damage the o-rings.

- R. Saban reported that at 11:00 on Friday, the air drying unit of sector 78 was switched on for the first time. Humidity levels dropped from about 55% to about 35% with a noticeable effect on current lead condensation. He also noted that the sector as far as CV is concerned is under 'Access conditions' not 'operation with beam, meaning that the air speed in the tunnel is about half the nominal (36000 m<sup>3</sup>/h) under operational conditions. R. Schmidt expressed the wish to have the air speed logged.
- R. Saban noted another incident that happened on Saturday: there was a spurious red telephone alert at the pompiers coming from one of the red phones of sector 78. The incident will be discussed and any lessons learned will be taken into account in the access procedures during hardware commissioning.
- Next meeting Thursday 3 May at 8:30 in 2889-R-009

M. Koratzinos

## 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" <a href="https://edms.cern.ch/document/833365/1">https://edms.cern.ch/document/833365/1</a>
	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>.