

RAT Réunion Avancement Travaux *Beam Dumping System*

HARDWARE COMMISSIONING COORDINATION

February 20, 2007, 9:45 - Building 865-1-D17

Present: Esther Barbero Soto, Boris Bellesia, Etienne Carlier, Laurent Ducimetiere, Katy Foraz, Mirko Pojer, Jan Uythoven, Wim Weterings.

INSTALLATION STATUS

- Kickers: all magnets are aligned.
- Generators: all in place.
- Cabling for MKB already connected on both sides (generator and MKB sides) in both UA's. Cabling for MKD on generator side in UA63 is finished. Cabling for MKD in UA67 is on completion. On tunnel side they are completing the positioning on the rails (21.02).
- Beam instrumentation: BPM installation is not yet finished (will be completed on both sides by week 10).
- Problems with the vacuum pipe on Q4: not enough space? New pieces are probably needed!
- TDE in UD62 is in position. TDE in UD68 will be ready for the end of May.
- Problems of space on top of magnet line to move components from one side to the other in UJ62 and UJ67 are being investigated by installation.
- Power distribution for MKB controller: the racks will be probably in position at the end of this week (w8); the calculations folder has been already sent for validation to Norisko and a safety inspection will be possibly carried on starting from next week.
- Optical fibres for pulsing are missing (action K. Loukili).
- Fire detection system: cables are missing; a campaign is foreseen for w14 to w17 (action J.C. Guillaume). Particularly important on top of TCDS (graphite blocks) and in the two tunnels TD62 and TD68.

VACUUM COMPONENTS STATUS

- Bake-out of 6L will be finished by w10-11
- Bake-out of 6R will be finished by w11-12

TEST ACTIVITY

- Test PROFIBUS-DP communication network performed on Monday (19.02).

DOCUMENTATION

- Hardware Commissioning Procedure “The beam dumping system in Point 6 with its associated instrumentation”:
 - few information are missing from AT/VAC concerning the vacuum system and its instrumentation (action J.M. Jimenez);
 - the list of people with the associated activities and the respective technical qualification they possess has been added to the document (12.02);
 - sketches of the required fences and safety distances during electrical tests have also been added (12.02).

MTF

- A list of possible steps for the commissioning of the Beam Dump System to be inserted in MTF has been prepared (see attached below); the septa are not included, being a part of the warm electrical circuit commissioning, as well as the collimators, whose test is identical to all other secondary collimator tests.

AOB

- Hardware Commissioning has some panels which could be used in case of necessity to better limit the area where tests will be carried on.
- A water maintenance intervention has been scheduled for the w18 to w20 (demineralised water, cryogenic services and iced water will be affected).

**Next meeting:
Tuesday February, 27
9:45 building 865.**

Step MTF for DUMP SYSTEM commissioning

01_HCA_BD_Communication tests
02_HCA_BD_Individual generator tests
03_HCA_BD_Timing test
04_HCA_BD_Test EMC (450 GeV)
05_HCA_BD_Test EMC (7 TeV)
06_HCA_BD_Rogowsky and Pearson coils tests
07_HCA_BD_Synchronization test
08_HCA_BD_Re-Trigger distribution
09_HCA_BD_Local Beam Energy Tracking system
10_HCA_BD_Signal acquisition system
11_HCA_BD_IPOC
12_HCA_BD_Trigger Synchronization and distribution
13_HCA_BD_Internal Failure reaction

20_HCA_BD_Communication tests
21_HCA_BD_Individual generator tests
22_HCA_BD_Timing test
23_HCA_BD_Test EMC (450 GeV)
24_HCA_BD_Test EMC (7 TeV)
25_HCA_BD_Rogowsky and Pearson coils tests
26_HCA_BD_Synchronization test
27_HCA_BD_Local Beam Energy Tracking system
28_HCA_BD_Signal acquisition system
29_HCA_BD_IPOC
30_HCA_BD_Internal Failure reaction

31_HCA_BD_Pulse test at 450 GeV
32_HCA_BD_Pulse at 7 TeV

40_HCA_BD_Vacuum leak test
41_HCA_BD_Water flow and leak test
42_HCA_BD_PT100 sensor test
43_HCA_BD_Girder movement

50_HCA_BD_Handling tests
51_HCA_BD_Ventilation system tests

60_HCA_BD_BPM tests
61_HCA_BD_BLM tests
62_HCA_BD_FBCT tests
63_HCA_BD_BTV tests

70_HCA_BD_LBDS to BICs
71_HCA_BD_BICs to LBDS
72_HCA_BD_Timing check
73_HCA_BD_Other equipment to BIC

80_HCA_BD_Remote operation from CCC
81_HCA_BD_EMCC test while pulsing (450 GeV)
82_HCA_BD_EMCC test while pulsing (7 TeV)
83_HCA_BD_Interface test
84_HCA_BD_Beam instrumentation and control integration
85_HCA_BD_Beam energy tracking system
86_HCA_BD_Dump request
87_HCA_BD_Local post mortem
88_HCA_BD_Vacuum control communication
89_HCA_BD_BPM tests
90_HCA_BD_BTV tests
91_HCA_BD_BLM tests
92_HCA_BD_FBCT tests
93_HCA_BD_BIC remote operation
94_HCA_BD_Arming of BIC
95_HCA_BD_Abort gap synchronization
96_HCA_BD_Injection system comm