

# Minutes of the 5th FOM meeting (2010) held on 16.02.2010

Agenda:

- 1) Follow-up of the last meeting (R. Steerenberg)
- 2) Status of the machines (Supervisors)
- 3) Schedule (R. Steerenberg)
- 4) AOB
- 5) Next agenda

## 1. Follow-up of the last meeting

The minutes of the 4<sup>th</sup> FOM meeting were approved.

Follow-ups from the last FOM:

a) The technical stop of the 22 March has been confirmed. The colleagues should send the different activities to the machines superintendents (list available [here](#)). J. Ridewood is replacing N. Gilbert for the SPS-related activities.

b) LHC start-up: see schedule.

c) During the week, few equipment groups mentioned a problem for some of their HW: the maintenance period was schedule to be concluded by April, ready for the beginning of the non-LHC run. Since some of those equipments are part of the interlock chain, it will not be possible for all of them to be OFF while the machines are running. The different groups should provide as soon as possible a list of the remaining equipments for which the maintenance has been postponed and it should be done before the next technical stop. In this case, the interventions will be scheduled.

## 2. Status of the machines

**Linac2** (D. KUCLER):

The Linac2 run was without any problem.

**PSB** (A. FINDLAY):

The BI.STP vacuum leak mentioned last week has been repaired. At the same time, C. Dutriat repaired the power converters of the SEMGRIDs.

The beams were stop on Wednesday as scheduled and normal operation could be re-established on Thursday afternoon at 13:30.

In parallel with the setting-up of the LHC beams (LHCPROBE, LHCPILOT, LHCINDIV), the MTE beam preparation started.

Oscillations of the BT.DVT20 required the intervention of the piquet Power.

The power converter was replaced by its spare. The OASIS signal is not available for the spare.

The original converter should be put back in operation in the current week. The problem on the missing OASIS signal is also being followed up.

S. Hancock asked if the transverse emittances of the LHCINDIV are the same as last year. A. Findlay replied in the affirmative, i.e., about 1  $\mu\text{mrad}$ , which is smaller than what was specified in the past.

**PS (R. STEERENBERG):**

The run of the PS with the 13 MVA transformer went very smooth. On Wednesday, the MPS was reconnected to the load and the tests started. On Thursday, the final checks with the Siemens technicians were concluded and the PS could be put back in operation.

The setting-up of the SFTPRO beam with CT extraction for the SPS was done and the beam provided to the SPS. The LHCPROBE setting up also started.

The MTE magnetic cycle was prepared on Friday.

On Tuesday, new calibration tables for the BWS54 and 64 were loaded.

On Wednesday, the tests of the figure-of-eight concluded. Tests were done also for the “ralentisseur” and the injection SEMGRIDs. The instrumentation works as expected, however the alarm in LASER signalling that the grids and the beam stopper are IN did not work.

During the end of the last week, the PFW-FW was tripping few times. The expert could solve the problem.

On Friday, the 80 MHz cavity in SS08 was not running correctly and was replaced by the spare in SS88. The 40 MHz cavity was not following the voltage program correctly. C. Rossi solved the problem.

The same day, the MTE equipments were put back in operation and the magnetic cycle was prepared.

During the week-end, a problem with the LLRF of the bunch splitting at 3.5 GeV/c required the intervention of the expert.

R. Steerenberg asked if there was any feedback from Siemens concerning the MPS.

C. Mutin replied that, according to the technicians, everything is in perfect status.

S. Gilardoni asked if there is the possibility to have another spare for the sliding rings.

C. Mutin replied in the negative. In the case that a serious problem with the MPS would appear, the intention would be to put POPS in operation as soon as possible.

**SPS (K. CORNELIS):**

On Wednesday, three magnets were displaced following the orbit correction campaign. At the same time, the investigations in BA2 were done following the HV problem of two weeks ago. F. Tarita mentioned that the network has been reconfigured and the over voltage incident should not happen again.

On Thursday, at the beam restart, it was difficult to re-establish a clean circulating beam. A screen in the ring, used the last time during the lepton period, was found in the position IN.

The SFTPRO-like beam, CT extracted from the PS, was used on Friday to recondition the RF.

On Monday, the LHCPROBE beam was used for the RF fine setting-up. Everything is ready to send beam to the LHC for the TI tests on Thursday night.

On Wednesday, the DSO tests of the TI lines will be done. No beam will be present at that moment in the SPS.

R. Steerenberg asked if there was any alarm on LASER related to the screen blocked in the ring. K. Cornelis replied that was not the case since the screen has not been used at least since the last 10 years and the control is still NODAL. A list of this type of old devices will be issued soon, with the goal of renovating their control.

H. Vincke asked if the screen caused large losses. K. Cornelis replied that there was only low intensity in the machine, so the losses were not too large.

R. Steerenberg asked about the results of the re-alignment campaign. K. Cornelis replied that everything went as expected. It was also noticed that the correction is done to compensate a different behaviour of the new magnets with respect to the old ones. The orbit at high energy shows a clear difference due to the different saturation of the new magnets.

A. Bland asked if it would be possible to reboot the SIS machine to update some of the drivers. K. Cornelis replied in the affirmative, since this will cause only a 10 minutes stop.

R. Steerenberg asked about the results of the tests with the vacuum valve closed in front of the TT20 splitters. K. Cornelis replied that, as expected, the valves are nearly transparent to the beam and that a more detailed report will follow in one of the next IEFC or MSWG meetings

**North Area** (mail from H. BREUKER):

The AMS run concluded successfully and the experiment might come back for another test beam.

**CTF3:**

M. Lamont mentioned that the “beam permitted” has been signed.

R. Steerenberg mentioned that there was a problem with the access system following the flood in the MCR during the Xmas stop.

**TI** (J. NIELSEN):

There was an electrical network perturbation for the compensator in point 2.

### **3. Schedule / Supercycle / MD planning**

The 2010 schedule (V1.3) is available at:

[https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule\\_v1.3.pdf](https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.3.pdf)

The schedule for the LHC tests is the following:

Thursday 18 February:

20:00 Pt2/Pt8, adjacent sectors, LHCb and ALICE closed and patrolled.

22:00 Start Beam extraction to TI 2 & TI 8 interleaved at low intensity.

Friday 19 February:

08:00 -10:00 Radiation survey.

Alice & LHCb and LHC point 2 / 8 will be accessible depending on the results of the RP measurements, as soon the survey has finished.

The beams required to the injectors are the LHCPROBE and the LHCINDIV.

The start of the LHC is foreseen after the middle of next week.

A series of the CO interventions are available in the web page <https://espace.cern.ch/be-dep/FOM/Lists/Agenda/calendar.aspx>.

N. Cohan asked if the technical stop of the week 17 is mandatory to change the brushes of the MPS motor-set. R. Steerenberg replied that this is the case, but also the stop is in preparation of the non-LHC physics run starting few days later.

## **4. AOB**

## **5. Next meeting**

The next meeting will be held on Tuesday, 23 February at 10:00 in 874-1-011.

Preliminary Agenda:

- 1) Follow-up of the last meeting
- 2) Status of the machines
- 3) Schedule
- 4) Special topics:  
How to prevent protons from going into the NA during ion runs. (D. Manglunki)
- 5) AOB
- 6) Next agenda

Minutes edited by S. Gilardoni