

Minutes of the 31st FOM meeting held on 30.08.2011

Agenda:

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

1 Follow-up of the last meeting

The minutes of the 30th FOM meeting were approved.

Follow-up from the last FOM:

Pending actions:

Status of the PS-Bfield fluctuations with POPS. (S. Gilardoni)

The fluctuations are still under study. A dedicated NMR-probe will be installed. Action not closed.

Pentek cards. (R. Steerenberg)

Three actions have been taken:

- A card from LEIR has been lent to the PS machine.
- CO is trying to purchase new cards.
- A long term solution is under study with a different type of card.

Action closed for the FOM but to be followed up by CO.

2 Status of the machines

Linac2 (G. Bellodi reported by K. Hanke):

The linac has been running smoothly this week. There was full beam availability. No issues to be reported.

PSB (G. Rumolo reported by K. Hanke):

It was a very quiet week for the PSB with only 17 minutes lost on Wednesday to reset locally a quadrupole in the BTP line.

ISOLDE (E. Siesling):

GPS was running with a UC target. Na beams were delivered to the Miniball experiment through the GPS separator and REX. The set-up finished on Wednesday afternoon after which the beam was

delivered to Miniball. The yields were too low for ^{30}Na , so the experiment switched to ^{26}Na on Thursday.

Issues:

- There were a few trips of the IHS and 9-Gap RF amplifiers which could be restarted without problem (Thursday-night).
- The 9-Gap is running at a slightly lower max power following the problems of the previous week. Therefore the total energy of the beam has been slightly reduced without consequences for the physics.
- On Saturday-evening the IHS section vacuum went down following a failure of a turbo pump. The vacuum could be restarted as well as the IHS RF amplifier which had tripped on a vacuum interlock.
- The server cfv-170-arextrap is crashing from time to time. This stops the REX-TRAP applications. E. Piselli and F. Locci are working on the problem.
- On Monday-evening the POWGPS PLC for the target and line heating went down. After restarting the PLC and rebooting the DSC it still behaved abnormally. The target and line heating were then set manually so that the physics could continue while protons were available.

On HRS a target change took place on Friday and the stable beam set-up is ongoing for the upcoming REX run.

Issues:

- The HRS and GPS robot could not be operated on Thursday. At first a control-related problem was suspected but it turned out that the robots had lost their programs and/or calibrations during the last power-cut. Many thanks to E. Genuardi (CO) for his help and patience. On Friday with the help of R. Catherall the programs were reloaded and the robots recalibrated after which the target-change went on smoothly.

Comments/questions:

- A. Bland mentioned that the RS232 communication bus for the ISOLDE robots control is obsolete and asks whether anyone besides R. Catherall can restart the ISOLDE robots.
- E. Siesling replied that procedures and documentation on the operation of the robots are being written so that more people within the ISOLDE team can deal with robot problems. In the longer term an upgrade of the robots is foreseen.

ISOLDE users (M. Kowalska):

Miniball was reasonably happy. Although ISOLDE and REX machines were performing well the target yields were too low for the challenging ^{30}Na beam that was requested. Instead the users took the less exotic ^{26}Na and could run successfully. A ^{224}Ra beam was delivered to Miniball for another experiment last night.

From Thursday on the two targets will take protons in parallel. In agreement with RP the maximum allowed intensity (shared between the two targets) will be raised to 2.5 μA .

Comments/questions:

- The proton sharing should start during working hours so that it can be supervised by RP.

PS (S. Gilardoni):

It was a good week for the PS. All requested beams could be delivered during the LHC MD. They were only a few problems:

- On Monday there was a problem with the transverse emittance for the LHCINDIV beams. It turned out that the dampers were not working. The problem was difficult to diagnose as it did not trigger any alarm.
- On Tuesday there was a problem with one cavity. An intervention took place on Wednesday to repair it.
- On Wednesday the beam could not be steered correctly during the LHC ion cycle. The experts are working on the problem.
- There is no spare power converter for LHC beams for the 40 MHz cavity. The RF group is following-up this issue.

East Area (L. Gatignon):

The East Area was running with DIRAC, IRRAD and the T9 test beam. As T9 (ASACUSA test) completed its program on Sunday afternoon, there is no user in EASTA until some time on Thursday this week. CLOUD will only come back in October.

On Friday evening several trips of ZT8.QDE01 caused radiation alarms. Fixed by first line.

East Area Users (H. Breuker)

Nothing to report for the East Area, DIRAC is running smoothly.

TOF (H. Breuker):

TOF will resume regular shifts on Thursday morning.

AD:

No report.

AD Users (H. Breuker):

Alpha was running out of liquid helium on Sunday morning following a problem of delivery.

SPS (K. Cornelis):

It was a good week for the SPS.

The beams for the LHC MD were prepared. Some scrubbing in the SPS had to be done before delivering 25 ns beams to the LHC.

North Area (L. Gatignon)

In general stable operation of all NA beam lines whenever the machine was up. NA61 is now running well at +158 GeV/c, using $4 \cdot 10^{12}$ ppp on T2 (was $7.5 \cdot 10^{12}$ ppp for 13 GeV/c).

On Tuesday afternoon the absence of beam from the SPS lead to the rescheduling of one of the summer student workshops in the H6 beam. The workshop could be completed in excellent conditions on Wednesday.

North Area users (H. Breuker)

NA61 is running smoothly. NA63 and UA9 teams arrived and are installing equipment.

COMPASS had a fast discharge on the polarized target last Sunday. This is under investigation in order to prevent it from happening again.

CNGS (H. Breuker)

The horn power supply tripped several times, under investigation.

CTF3 (T. Hakan):

On Monday morning an access to the machine took place to fix the electron gun. In the afternoon two-beam acceleration was done to check the acceleration of the probe beam for a given power in the accelerating structure.

On Tuesday night there was a successful break down measurement where the beam was supervised from the CCC. During the day the commissioning of the recombination factor 8 continued.

Wednesday, there was a problem with the low-level RF which was fixed after a Joerger card was replaced. The rest of the day was devoted to 1-to-1 steering in TBL and checks of the energy spread in the segmented dumps.

On Thursday, the set up of the factor 8 beam continued.

Friday, after an access to fix a magnet the factor 4 beam was optimized and then the beam was left during the weekend to do a break down measurement. Unfortunately, there was a problem with a kicker which stopped the weekend operation.

TI (P. Sollander):

Nothing to report.

LHC interface with injectors (M. Lamont):

The beam availability was not very good last week. The MD started on Wednesday. After the technical stop the LHC will go back to proton operation.

Linac3 (D. Küchler):

The ion source tuning is still problematic. More work is needed. There will be a refill of the oven on Wednesday 31st of August.

LEIR (M.E. Angoletta):

It was a good week for LEIR. There were several problems with electronic cards at the start of the week but then it was running fine. The beam intensity was sufficient until now but more intensity will be needed in the future. Some more beam optimisation is required.

PS ions (S. Gilardoni):

The ion transmission was improved by steering the injection into the PS.

K. Hanke asked if the date for ion injection in the SPS (5/9) is still realistic. S. Gilardoni replied that this date should be kept for the moment.

3 Schedule / Supercycle / MD planning

The 2011 schedule (V3.2) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/injector_schedule.pdf

The planning for the upcoming MD is available at:

<https://ab-mgt-md-users.web.cern.ch/ab-mgt-md-users/2011/>

4 AOB

D. K uchler asked if the next ion source oven refill can be moved to the 19th of September. The change is approved.

K. Cornelis said that the restart of the SPS after the technical stop might be delayed due to the realignment of a magnet. This might affect the LHC MD on Thursday.

R. Steerenberg mentioned that they would like to pulse the POPS on Wednesday night to optimise the POPS operation.

5 Next meeting

The next meeting will be held on Tuesday, 6th September at 10:00 in 874-1-011.

Preliminary Agenda:

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Minutes edited by D. Voulot