Minutes of the 15th FOM meeting held on 10.05.2011

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 14th FOM meeting were approved.

Follow-up from the last FOM:

1.1 Pending actions:

Problems with POPS (3 actions)

Studies will be resumed when POPS is back. Actions not closed.

Make the orbit measurement system work with the presently defined user files (PS supervisor/BI)

R. Steerenberg said that BI has deployed a fix (a file related to RF). Operation has started working with it. S. Gilardoni said final tests will be performed tomorrow night. Action not closed.

2 Status of the machines

LINAC2 (M . O'Neil):

M. O'Neil sent the report for LINAC2 before the meeting:

"Four separate failures of auxiliary power supplies (trivolt +/-15V 5V) that are used to power the control chassis of the tank 1 quadrupoles. The piquet power replaced them. A replacement of all of this type of supply used in Linac 2 tank 1 quadrupoles is already foreseen for the technical stop on Tuesday.

A reset of the RF power supplies was also required after a mains glitch on Monday morning.

Total downtime due to these faults was limited to 72 minutes."

PSB (A. Findlay):

It was a good week for the PSB. MD users for the various MDs in LHC were set up and all beams were ready within specifications.

ISOLDE had issues with beam line.

Several power supplies failures occurred.

Before the meeting, N. Gilbert mentioned that RP was not yet in the machine at 9:00 when the patrol should have started at 8:00. This delayed the start of the planned interventions.

ISOLDE (D. Voulot)

It was a difficult week for ISOLDE.

A failure of the target cooling system occurred on Tuesday. Such failures occurred in the past and changes to this system were actually planned already. In fact, a system to monitor these failures had been put in place and the problem occurred when an update of that system was performed.

The RFQ amplifier had to be repaired and work to suppress discharges in the RFQ cooler is ongoing. The RFQ cooler amplifier is planned to be replaced by another system in the medium term future.

When preparing to change the GPS target, a valve could not be closed (work is still ongoing).This is linked to the type of valve used for the target and most likely a design issue.

S. Hutchins confirmed that the agreement of RP was not needed as the intervention did not require access into the target zone.

ISOLDE ran over the weekend for COLLAPSE.

ISOLDE users (M. Kowalska):

Despite all the issues, it was a surprisingly successful week for the users. GPS was only shifted by 1 day and users got 50% of nominal beam on HRS.

PS (S. Gilardoni for A. Grudiev):

It was a good week for the PS with minor problems.

The PS provided nominal LHC beams LHC_INDIV, LHC50 single batch (for operation) and LHC50 double batch (for MD), TOF and CNGS at nominal intensities and AD beam for setup. EASTA is taking beam but not EASTC as there is a problem with one of the splitters (F61.SMH01). The position of the septum blade is not correct, preventing from sending beam to the T7 irradiation zone. This problem should be fixed during the technical stop today.

Vertical instabilities occurred on the LHC50 double batch and it was found out that it was due to low energy quadrupoles that were not pulsing. The current in the other quads was increased as a temporary solution but the issue should be fixed during the technical stop today.

An issue with the injection kicker timing occurred on Thursday. A first fix by the piquet Power seemed to work but the problem reappeared and was finally solved on Sunday.

A temperature interlock problem with the septum SMH57 affected the start-up of the EAST users.

Several problems occurred on the 10 MHz cavities C75, C91, C96 and C51 during the weekend and are being investigated.

The question came up as to who is responsible for maintenance of the blade of a splitter that distributes the beam to different lines. Interventions on septum like magnets should be with the TE/ABT group and not the magnet group (as confirmed by V. Prieto Hermosilla after the meeting). In particular, the control of stepping motors should be seen with E. Carlier. Another problem is that the priority right now for people maintaining motors is on collimator motors for LHC.

The PS is constantly struggling with emittance measurement. The wire scanners got repeatedly stuck in the beam, which may lead to wire breakage and to beam blow-up and losses. BI was informed but nothing can be done today during the technical stop.

East Area (L. Gatignon):

Beam was delivered to T9 and T10, which started without problem.

As already mentioned in the PS report, time lost for irradiation in T7. Besides, DIRAC is delayed and it is not clear when they will come. One new beam request came from ASACUSA.

TOF (H. Breuker):

Everything seems to be going very well.

AD (T. Eriksson):

Last week was the final week of setting up.

An RF tube for C10 needed to be replaced at the last moment. The low level RF was set up for all energies. Checks of the beam profile measurements with gem monitors were performed by putting a collimator in the ASACUSA beam line. This last minute test required to break the vacuum and pump down.

Physics started yesterday as planned. It is going fine but setting up of the RFQD lead to radiation alarms. There is also a problem with access zones.

In theory, today is a 24h technical stop, and users are ready and aware.

AD Users (H. Breuker):

An article in the bulletin will be published with all the experiments and describing their expectations for this year. An issue also occurred as information seems to have been leaked.

SPS (K. Cornelis and E. Métral):

It was a good week for the SPS with different kinds of beams generated for the LHC MDs.

A few problems occurred: MKP interlock issues were bypassed by the expert until the technical stop today. The transmitters TRX5 and 6 are taken care of now. It was decided that Quadrupole 535 will be replaced. As a consequence, tonight's MD is cancelled to take the time to do beam based realignment.

North Area (L. Gatignon)

Progress was made with understanding the TAX breakdown, and the priority is to find why three TAX broke down simultaneously. All three TAX had insulation badly damaged. Specific tests have been carried out which indicate that the damage is due to irradiation. Two motors need to be changed. The priority is to survive this year. Another TAX in the T42 branch is in intermediate position but A Masi thinks he might have moved it in dump position. Scenarios are being finalized (in the frame of ALARA). L. Gatignon said that he will have a better idea of the impact on the North Area schedule next week.

North Area users (H. Breuker)

A shift of the schedule by 4 to 5 weeks is excluded and some user runs will unfortunately have to be cancelled.

CNGS

K. Cornelis said it is running well. 1.4e19 protons on target have already been achieved and it will increase quickly as long as North Area does not run.

CTF3 (S. Pasinelli):

It was a bad week as an issue occurred with the gun. The cathode current was twice higher than it normally is. The cathode was then replaced, but the problem remained after the switch. The cathode was changed again for another new cathode that behaves correctly now.

Virtual samplers are working satisfyingly.

Following the fire, modulators were all tested and everything works now.

TI (P. Sollander):

Two electrical glitches occurred on Friday and Monday.

This morning a problem occurred with the technet and disturbed the access. A. Bland said it was him indirectly. He contacted ITCS and put down the service from which traffic was coming. It is unclear why this happened.

LHC interface with injectors (M. Lamont):

Last week was the first MD period and it has been remarkably successful even though half a day was lost for QPS. Intensities for the beam-beam MD reached over 1.7e11p/b (limit set for the LHC instrumentation).

The switchover was smooth as all was copied onto spare cycles.

Restart is scheduled between Thursday and Friday. The tentative planning is test dumps, then luminosity calibration, then switch back to normal physics operation (728 bunches first and then continue increasing by 144, to 1200 or 1400 bunches).

3 Schedule / Supercycle / MD planning

The 2011 schedule (V2.0) is available at:
https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/injector_schedule.pdf

All planned interventions for the injector complex are available via the on-line agenda:

https://espace.cern.ch/be-dep/FOM/Lists/Agenda/calendar.aspx

Beam back will be back in SPS tonight for alignment and tomorrow morning for the MD.

In the PS, physics will start as soon as possible.

MD ends at 6:00 on Thursday morning.

4 AOB

A. Bland said an intervention on TIM will occur next Wed and the impact will be that no PS access will be possible during 10 min.
K. Kostro said problems on TIMBER may occur today between 14:00 and 14:30.

5 Next meeting

The next meeting will be held on Tuesday, 17th May at 10:00 in 874-1-011.

Preliminary Agenda:

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Minutes edited by B. Salvant