Minutes of the 25th FOM meeting held on 06.07.2010

Agenda:

1) Follow-up of the last meeting (B. Mikulec)
2) Status of the machines (Supervisors)
3) Schedule (B. Mikulec)
4) Special Topics: Preliminary list of activities for the next technical stop
5) AOB
6) Next agenda

1. Follow-up of the last meeting

The minutes of the 24th FOM meeting were approved.

Follow-up from the last FOM:

a) Status of the PS B-field fluctuations.
Analysis and measurements are ongoing. An MD has been scheduled immediately after the technical stop the 19th of July.

b) Send activities for the next technical stop to the machines superintendents. See Special Topics section.

c) Schedule the beam stop for the next technical stop. See Schedule section.

S. Gilardoni reported some comments from E. Piselli on the DSC controlling the Faraday Cups. The problem mentioned last week related to the excessive number of connections has been solved by disconnecting some logging processes which should not have been there for that particular DSC.

2. Status of the machines

Linac2 (R. SCRIVENS):
After the problem mentioned during the last FOM concerning the RFQ sparking, the intensity of the ISOLDE beams could be restored between Tuesday and Wednesday.

On Wednesday, a power glitch led to an RF trip, but the recovery was quite fast.

On Monday, a power glitch on the 18 kV put off basically the entire complex, and the Linac was only back after ~5 hours.
F. Tarita reported that the cause of the glitch could not be identified yet, but it was clearly on the internal network on the Meyrin site. Fortunately, no hardware was damaged.
Three hours would be needed to test all the HV electrical equipment to investigate the problem. In the meanwhile, more spare parts will be prepared to reduce the eventual down time.
One of the sources of the glitch could be related to the high temperature of those days.

H. Breuker asked if the first power glitch observed in the SPS during the LHC injection tests could have be caused by the same problem. F. Tarita replied in the negative.

PSB (B. MIKULEC for K. HANKE):
On Tuesday evening there was a problem accessing the AFS volumes necessary to control the machine. A. Bland reported that by mistake, a process generated by the cryogenics accessing the web-server was running from a private AFS account. This saturated completely the web-server, blocking the AFS access.

On Wednesday, a small power glitch powered off the entire complex. The machines could be restarted quickly.

On Friday, the MPS tripped for the first time with a resettable fault. The same problem appeared during the weekend.
There was a problem with the condition of the BI line beam stopper. The external condition on "beam stopper in" was inhibiting all the beams although the beam stopper was in open position. The piquet intervened with a temporary solution to the problem. A definitive solution was found on Monday: a new source for the interlock giving the beam stopper status is currently in use.
The same day, the ISOLDE watchdog was triggering without any apparent reason, in particular without any exceptional beam loss. BI is following up the issue.

Concerning the MDs, the LHCINDIV was delivered to the SPS with twice the nominal intensity within the good longitudinal emittance.
The longstanding problem of the ring 4 losses at extraction for the high intensity beams has been solved by changing the working point at extraction and increasing the transverse coupling.

ISOLDE (M. ERIKSSON):
ISOLDE had a pretty good week.

GPS: there were few problems with the console manager and the watchdog. The separator tripped about 5 times. This problem could be related to the current high environmental temperatures.

HRS: the target should have been changed on Thursday. Unfortunately, the target was not ready due to a too large contamination leading to extensive outgassing. The target was finally ready on Monday of the following week. The time not used by the HRS users due to the target delay was used by the GPS users. One HRS user run had to be cancelled.

PS (Y. PAPAPHILIPPOU):
The PS had quite a good week.

On Tuesday evening, the AFS aforementioned problem blocked the machine operation.

During the entire week there was a large number of MPS faults. In total, four hours were lost due to the different stops, included the ones related to the electrical power glitches. During the last one, the power piquet had to intervene to restart the MPS.

On Wednesday, the INCA deployment took place. Few bugs were fixed directly after the deployment, but without any particular problem for the beam delivery for physics. Y. Papaphilippou wanted to congratulate all the CO colleagues.

On Thursday, the 40 MHz cavity tripped and could not be restarted. The specialist had to do a local reset on a power breaker.

The power cut on Friday due to the 18 kV problem powered off most of the PS. The only equipment requiring the intervention of the specialist was the SEH31: the pump of the insulation oil had to be manually restarted.

EAST AREA (L. GATIGNON):
The week was rather calm, with only two resets on two different power converters.

CLOUD ran during the weekend until Monday morning, profiting from the granted extension of their data taking.

On the North branch there is only T10 running. The magnets of T11 have been powered off.

EAST AREA USERS (H. BREUKER):
DIRAC is running without any problem.

The ALICE run is progressing as expected.

TOF (H. BREUKER):
The intensity limitation due to the saturation of the BCT in the FTN line should be solved this week thanks to the use of a WCM of TOF.
Currently, the intensity delivered to the experiment is above the scheduled one.

AD (K. MIKLUHA):
The main bend power converter tripped off a few times per day until Friday, when two regulation cards were changed.

On Wednesday evening, the DR.DVT1304 was not following the GFAS function. Firstline changed a faulty communication card.

On Monday, during an MD the bunch length could be improved. The bunch length is still not the nominal one. Investigations to understand the problem will continue.

AD Users (H. BREUKER):
ALPHA submitted to PRL the first article concerning the anti-hydrogen trapping based on the data collected during the last two weeks of last year's run, i.e., during the extension granted at the end of the year. In total, the analysis presented bases itself on six events.

For ASACUSA, the Vienna group complained about the low intensity delivered to the experiment.

ATRAP is running fine.

M. Lamont asked how the AD experiments define an event. H. Breuker replied that after the anti-hydrogen trapping, the magnetic field of the Penning trap is powered off and the products of the anti-hydrogen annihilation are then detected.

SPS (D. MANGLUNKI):
The SPS had a quiet week.

The SPS suffered from the different thunderstorms. The MPS tripped few times as did the RF power amplifiers.
On Tuesday and Wednesday some high power circuits were damaged and were repaired on Wednesday morning.
One RF transmitter was finally repaired on Monday.

On Saturday afternoon the Chain 11 blocked in mode access. The expert had to intervene.
The TRX1 tripped few times, then the expert had to intervene.

On Monday 5/07 for the controlled blow-up of the transverse emittance of the LHC beams were performed. During the weekend, the blow-up was done by inserting a screen at injection. This, however, prevented the injection of the CNGS/SFTPRO beams. An attempt was made to mis-steer the injection, but this turned out to be not too effective due to the coupling between the H and V planes. On Tuesday 06/07, the setting up of the controlled blow up by using the transverse damper and the octupoles started.

The CNGS integrated intensity on target reached 1.5E19 to be compared to the expected intensity of 1.3E19.

North Area (L. GATIGNON):
The NA suffered from machine problems. The radiation level in BA8 increased recently, probably due to the new wobbling steering.

There were a few water overpressure alarms due to a faulty gauge.

North Area Users (H. BREUKER):
Nothing special to report.

CNGS (E. GSCHWENDTNER):
Nothing special to report.

CTF3 (D. MANGLUNKI):
All the zones were closed last week. The complete safety chain has been tested and confirmed to be operative.
The setting up of the RF started. One of the modulators had a time jitter, which could be solved by repairing the pulse network generator.

The beam went in the Linac up to the girder 10.
The RF conditioning will start the 7th of July, and beam in the ring is expected by the end of the week or after the weekend.

The operator crews in the CCC will supervise the klystron during the nights, while during the weekend everything will be powered off.

LINAC3 (R. SCRIVENS):
The Linac is running in MD mode.

TI (E. LIENARD):
A "Major event report" will be issued soon concerning the last power cut.

LHC interface with injectors (M. LAMONT):
The LHC took 3,7 and 10 nominal bunches, which are now stable. A recalibration of the BWS is ongoing. This triggered the need of the transverse emittance blow-up in the SPS.
The commissioning foresees the preparation of more bunches at injection.

3. Schedule / Supercycle / MD planning

The current version of the 2010 official schedule (V1.7) is available at:
https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.7.pdf

An MD will take place on Wednesday in the SPS.

Concerning the planning of the technical stop taking place the 19/7:

a) all the beams will stop at 5:00 AM;
b) depending on the activities in the PS in the ventilation stations and in BA1 and BA4 in the SPS, the CT extracted beams (CNGS/SFTPRO) might have to stop 24 hours before the first access, i.e., they might stop the 18/7 at 8:00 AM. This will be confirmed during the next FOM by RP.

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.

4. Special topics: Preliminary list of activities for the next technical stop.

D. Mcfarlane presented the activities for Linac2 and PSB for the next technical stop. The slides with the detailed list of the activities and access requests can be found here.
The PSB will not be available to restart before 17:00 due to the painting activities for the 18 kV transformers.

R. Brown presented the activities concerning the PS. The slides with the detailed list of the activities and access requests can be found here. Shielding will probably be put in place in front of the SMH16 for the work in the ventilation station.

The final list of the activities will be presented during the next FOM, together with the activities of the SPS.

R. Scrivens added that depending on the intervention on the LEIR water circuits, the Linac2 restart cannot be predicted yet.

5. AOB

6. Next meeting

The next meeting will be held on Tuesday, 13 July 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: Updated list of activities for the next technical stop.
5) AOB
6) Next agenda

Minutes edited by S. Gilardoni