Minutes of the 12th FOM meeting held on 06.04.2010

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 11th FOM meeting were approved.

Follow-ups from the last FOM:

a) Status of the PS-Bfield fluctuations. G. Metral said that the studies are ongoing to understand this effect. To reduce the impact of the fluctuation on the operational beams, the F8L setting-up will not be done on cycles where the B-field is not present. S. Gilardoni added, and G. Metral agreed, that the setting-up of the new beams might be slowed-down due to this effect. The B-field fluctuations might also produce beam losses at injection of the high intensity beams.

b) PS radial steering GFA replacement/repair. K. Krostro said that CO plans to replace the entire crate of this particular GFA. This will be done next Thursday during the injector stop.

c) Confirm stop of week 17. See schedule. The injector stop has been cancelled as there will be a stop on Thursday 8 April.

d) EAST area magnet water leak status. S. Mataguez said that a spare magnet has been found and tested. The installation of the magnet requires the removal of the primary zone roof. The planning foresees the magnet installation the 20 April whereas the start of the physics is planned for the 29 April. It is not clear yet if nine days will be sufficient to reinstall the roof. In any case, K. Hanke will check if it is possible to do the setting-up of the PS slow extraction in parallel with the civil engineering work in the East Hall.

e) Linac2 source intensity fluctuation. D. Kuchler reported that the problem is still present. Investigations are still ongoing and there is some hope that the problem will be less severe once the production of long beam pulses, like for ISOLDE or CNGS, will start on a regular basis. S. Gilardoni mentioned that a 20% fluctuation from shot-to-shot might be an issue at the PS injection for the high intensity beams. The tune shift at injection will be different from shot-to-shot.

2. Status of the machines

Linac2 (D. KUCHLER):
The source intensity fluctuations are still present and the investigations are still ongoing.

On Wednesday, the DLINPOW1 DSC had to be rebooted twice and DLINSTIM one time during the night.

Monday night a 5V power supply of the source HT interlock chassis had to be reset locally by the PSB operator (~1 hour lost).

The bouncer is still not available. It can be changed but this would require a stop of one hour. This intervention is not urgent since it is used only for long beams.

PSB (B. MIKULEC):
The PSB had two problems during the week. On Sunday, a flood alarm was triggered. An inspection in the tunnel revealed a water leak on a connector of the cooling circuit of the magnet BR.BHZ81. The magnet expert changed a joint.
The stop was transparent for the LHC since it was just after a filling.

On the Easter Monday, intermittent losses or ring 1 were appearing for the users on h2. The LLRF piquet identified an overload on the NIM power converter, cured at first by removing the BBQ DDS, not necessary for the operation. However, the problem reappeared during the night. At that moment the piquet decided to change the NIM power converter.

All the beams are operational except TOF.
The CNGS user has been prepared with intensity larger than 3000E10.

PS (G. METRAL):
The PS had a good week.

The AD setting-up was finished.
The MD1 was delivered regularly with an MTE extraction to the SPS (I = 500E10).
The MD2 user has been prepared as a magnetic-field copy of the MD1 and should be used to deliver 1.7E13 to the SPS with MTE as soon as possible.

There was a problem with the access system. Some colleagues remained blocked inside the AD. This required the intervention of the expert. K. Hanke will follow the problem with the experts.

During the MTE setting-up, losses were observed increasing every ~12 minutes, as indicated also by the PAXS35. A fluctuation with a similar time scale has been observed on the current acquisition of the PFW and F8L. However, the fluctuations are too large to be real, since the horizontal tune seems quite stable. Investigations will be done with the expert.

During the week-end, the Qmeter was not working correctly. The expert has been informed.

On Monday, the MTE kickers were not operational due to a problem with the control of the oil circuit.

EAST AREA (S. MATAGUEZ):
As mentioned in the Follow-up section, S. Mataguez said that a spare magnet has been found and tested. The installation of the magnet requires the removal of the primary zone roof. The planning foresees the magnet installation the 20 April whereas the start of the physics is planned for the 29 April. It is not clear yet if nine days will be sufficient to reinstall the roof.

EAST AREA Users (H. BREUKER):
The users start to be ready. DIRAC will require the same beam as last year, at least for the first period of the run.

SPS (K. CORNELIS):
The week was pretty calm. On Tuesday, the beam was sent to the LHC for collisions. Unfortunately, it turned out that the LHC and the SPS are magnetically coupled in case of perturbation of one of the main SPS electrical circuits. Last Tuesday, the QF circuit had some perturbation, causing a variation of the magnetic flux through the LHC. This triggered the new QPS.
In the past a protection was in place to avoid this kind of problems. Unfortunately, during the last start-up this was not put back in operation. In the meanwhile, the QF circuit has been repaired.

The MTE setting-up with the low intensity beam has been progressing well, with 95% transmission efficiency. This setting looks reasonable, in particular if confirmed with higher intensity.

CTF3:
The facility is still down after the fire.

TI (J. NIELSEN):
There were two electrical problems on the EDF side.
The water leak in the PSB has been already reported by B. Mikulec.

LHC interface with injectors (M. LAMONT):
The first collisions at high energy were very successful.
The commissioning was progressing, to reach stable beam with collisions with 2 x 2 bunches.
A 19 hour long fill was done.

3. Schedule / Supercycle / MD planning

The 2010 schedule (V1.5) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.5.pdf

A new schedule will be issued soon. The draft is available here but it will be updated since a few changes and clarifications (like a different version number and the UA9 run) should be included.

The injector technical stop of week 17 has been cancelled.
There will be an intervention in TI2-TI8 on Thursday to exchange the vacuum chamber in correspondence of the TEDs.
During this period, the PSB and PS will stop between 8:00 and 16:00 whereas the SPS between 8:00 and 20:00 for the RF regular maintenance.
Interventions in the tunnels will be allowed after agreement with RP.

D. Kuchler mentioned that the hydrogen bottle and the bouncer of the LINAC2 will be exchanged.

H. Breuker added that AMS will come back for a test beam in August.

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. AOB

5. Next meeting

The next meeting will be held on Tuesday, 13 April at 10:00 in 874-1-011.

Preliminary Agenda:

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2) Status of the machines
3) Schedule
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Minutes edited by S. Gilardoni