Minutes of the 35th FOM meeting held on 17.11.2009

Agenda:

1) Follow-up of the last meeting (K. Hanke)

2) Status of the machines (Supervisors)

3) Schedule (K. Hanke)

4) Complex running after the end of the non-LHC physics run (K. Hanke)

5) AOB

6) Next agenda

1. Follow-up of the last meeting

The minutes of the 34th FOM meeting were approved.

Open actions from last FOM:

a) Follow up with RP specialists radiation alarms linked to PS extraction.

   S. Gilardoni mentioned that during the FOM all the CNGS beams in the SPS were extracted from the PS using the MTE extraction. The goal was to tests the extraction in a realistic situation and to take dose measurements inside and outside the PS tunnel.

b) Check that the request of the LHC-mastership is executed during the right supercycle.

   The issue will be followed by K. Hanke.

c) Plan the RP radiation survey in the complex.

The RP survey will take place on Tuesday between 14:00 and 18:00 (See Schedule and Special Topics sections).

2. Status of the machines

Linac2 (G. BELLODI):

The Linac had a good week without any particular problem. The only minor issue to mention was a water leak on Friday. The leak could be repaired with a temporary fix without stopping the Linac. The definitive repair will be done during the Xmas stop. S. Deleval has been informed about this request.

PSB (B. MIKULEC):

The PSB had few problems during the week. On Tuesday, the expert of the distributor examined the HW serving ring 3 and 4 to understand the few trips occurred last week and continued during the current week. Many HW parts were changed, including the thyristors. Finally the distributor could be put back in operation after a six hours and a half long stop.

At the same time, a water leak was identified on the power converter of the magnet BT.BHZ10. The spare power converter was put in operation to solve the problem.

On Thursday, losses appeared in ring 1. The LLRF expert found a water leak alarm triggered for the transverse damper. After investigations, the alarm did not seem to be caused by a real water leak. Later, the problem could be solved by changing the power converter of a NIM module used for the RF generation.

After a stable period, the losses reappeared and the power converter was changed again. Finally, on Friday, the power converter was changed again and the losses did not reappear.

Also on Thursday, the ring 4 DCCT transformer had to be demagnetised since it was giving bad acquisitions.

On Saturday, the ring 2 distributor tripped and the thyristors had to be changed.

ISOLDE (P. FERNIER):

ISOLDE had a good week.

GPS: the target in place was the #418, UC. The run was at 30 kV for MINIBALL. There were no problems at all. The physicists were very happy about the run.

HRS: the planned target change could not be done as the old target could not be unclamped. Since the radiation levels were considered too high, the manual removal of the target was postponed to the shutdown. During the shutdown it is foreseen to change the complete front-end. In the meanwhile, stable beam was provided to the separator.

ISOLDE users:

No news.

PS (A. GRUDIEV):

The PS had another very good week, reaching 99% availability.

There were only two brief stops to fix the relay gaps of two 10 MHz cavities.

East Area (L. GATIGNON, mail):

“Nothing special to mention neither for the East Area, nor for my North Area beams.

CLOUD now expects to be ready for beam by Tuesday evening.

I am not aware of any decision concerning the prolongation of the CLOUD run (they asked for two extra weeks).”After the meeting, the CLOUD request for an extension of their run by 2 weeks was approved. The experiment will continue until Monday, 7 December.

East Area Users (H.BREUKER, mail):

“CLOUD should be finally ready for beam by Tuesday 17th (Lau knows more) ...

... all other user's "happy" ...”

AD (K. MIKLUHA):

The AD had a very good week, with up to 4.23e7 pbar and 90% transmission efficiency at 100 MeV/c.

On Tuesday morning, ATRAP had a problem with the access system, which cold be solved by the piquet. The same day, an overheating of the power converter of the stochastic cooling pickup caused large losses after the second ramp. The expert replaced the power converter by its spare.

On Friday, the AQN value of the power converter of bending magnet DI.BHZ6044 was showing zero, although the magnet was ON with a non-zero value. First Line had to intervene to fix the problem.

The same day, the extraction kicker started to trip frequently. The specialist will check the kicker during the current week.

On Sunday, a water leak in the AD hall required the intervention of the piquet.

K. Mikluha wanted to thank the CCC crew who helped to fix the different problems during the weekend.

AD users:

No news.

NTOF (R.STEERENBERG):

The physics run finished last week. The experiment is taking data and accessing the area to solve a problem with the alignment of the secondary collimator.

SPS (E. METRAL):

The SPS had a good week. 99% transmission efficiency was reached for SFTPRO, 97% for CNGS, 94% for the MTE cycle.

Monday last week, the goal of 3.2e19 pot for CNGS was reached. The beam had to be stopped for a few hours to recover water samples and monitor the tritium in the air.

After restart, the oscillation of one of the orbit correctors was creating large losses. The magnet was put OFF.

On Thursday, a beam scan of the CNGS target was done to check the target alignment. E. Gschwendtner added that a radial displacement of the target was identified.

On Monday morning, a faulty interlock generated by one of the BPMs at the CNGS target was bypassed. This could be done since the beam was correctly centered on the target. Later, an intervention was necessary to fix a water-flow problem with quadrupole RQID410100.

CNGS (E. GSCHWENDTNER):

Good running. The promised intensity for this year could be reached.

SPS North Area (L. GATIGNON, mail):

Nothing to report; see PS East Area.

SPS North Area Users (H. BREUKER, mail):

Users are happy; see PS East Area.

LINAC3 (R. SCRIVENS):

The work on the source is ongoing. In particular, the vacuum leak on the bellows just after the source could not be repaired yet.

CTF3 (P. SKOWRONSKI mail, commented by D. MANGLUNKI):

“During previous week-end a vacuum leak developed in the Combiner Ring without beam operation. It was quickly repaired since it was connected to a joint failure. The ring was ready for operation already on Tue morning.

The time during the reparation we spent on detail studies and fine optimization of the injector using segmented dump and screen based measurements at girder 10 of the linac to quantify the beam quality.

Tuesday and Wednesday were devoted for fine tuning of the recombination with Delay Loop. The injection/ejection region of DL was studied revealing wrong calibrations of the BPMs over there. The orbit was corrected for this, giving 100% transmission through the Delay Loop and further to the Combiner Ring. Thanks to it also the stability of the recombined beam was significantly increased, although it is still not satisfactory.

Thursday was devoted to Test Beam Line commissioning. The Twiss parameters were measured on the beginning of the line, and optics rematched to it. 60% transmission was achieved.

On Friday we studied the subharmonic bunching system (1.5GHz) which shows unsatisfactory performance giving too long phase switching time.

Unfortunately the modifications did not bring any improvement, and contrarily the system delivered even more unstable beam. In the evening the initial configuration was put back in place. Further studies are carried out in this respect.”

K. Hanke asked when CTF3 will stop. D. Manglunki replied that the facility will stop on 14 December.

TI (P. SOLLANDER):

There was an electrical network perturbation on Saturday night due to a storm.

LHC interface with injectors (M. LAMONT):

The HW commissioning should be completed by Wednesday or Thursday. The machine will be then given to OP for the checkout. The first beam injection is expected for Friday evening or Saturday morning.

K. Hanke added that the injectors should check their LHCPROBE, LHCINDIV and LHCPILOT beams.

3. Schedule / Supercycle / MD planning

The 2009 schedule (V3.7) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/Schedule2009.pdf

The current week foresees normal operation, with the injection in the LHC between Friday and Sunday.

The physics run will end on the 23 November.

The extension of the AD run has been approved. The AD will stop on the 7 December at 8:00.

The AMS experiment will take data in the North Area between the 7 and the 12 December.

The extension of the CLOUD experiment run has been approved. CLOUD will finish on the 7 December.

The stop of the LHC after the Xmas break has not been confirmed, so all the machines should be prepared to start the 4 January.

The intervention agenda can be found at:

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

4. Complex running after the end of the non-LHC physics run (K. Hanke)

K. Hanke presented the planning for the machine running after the end of the non-LHC physics run.

The slides with the detailed schedule are available here and the list of the activities has been included in the intervention agenda accessible at https://espace.cern.ch/be-dep/FOM/Lists/Agenda/calendar.aspx. The schedule and the intervention agenda will be kept up to date as things evolve.

The machines will continue to run for the LHC after the 23 November. Some MDs will be possible in the PS and PSB but not in the SPS. The hard limit on the activities will be the power consumption, which has to be kept below 180 MW.

On Tuesday 24 November there will be the annual radiation survey in the CPS complex and in the SPS between 14:00 and 18:00. At the same time A. Bland will reboot the consoles in the CCC for a Linux upgrade.

Investigations about a possible vacuum leak in TI8 might become necessary.

During the night following the LHC stop on 16 December there will be a dedicated PS MD on injection measurements. The exact end time of the MD has to be confirmed by RP, as PS access is planned for the 17 December as from 09:00.

The requested magnet tests in the NA area will be done in parallel with the SPS operation and after the Xmas stop.

N. Gilbert mentioned the possibility of organising the lift maintenance the 17 and 18 December.

R. Scrivens announced that the Linac2 maintenance will be done during the weeks 51 and 52.

R. Brown mentioned that BT requested to change all the four PS septa during the LHC stop, as part of the usual preventive maintenance. K. Hanke replied that this intervention could be possible only in the period of the long LHC stop for the new QPS commissioning.

5. AOB

K. Hanke mentioned that the machine OP statistics will be available from the OP web page. The colour coding for the graphs is the following: a) green: beam requested by the users and delivered; b) gray: beam available but not requested by the users; c) red: beam requested by the users but not available due to a machine fault.

6. Next meeting

The next meeting will be held on Tuesday, 24 November at 10:00 in 874-1-011.

Preliminary Agenda:

1) Follow-up of the last meeting
2) Status of the machines
3) Schedule
4) Update on PS access system video (F.Havart, t.b.c.)
5) AOB

Minutes edited by S. Gilardoni