

Minutes of the 3rd FOM meeting held on 02.02.2010

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 2nd FOM meeting were approved.

Open actions from last FOM:

Solve scheduling issues in North Area related to AMS run and cooling circuit maintenance. The action can be closed. The AMS run is scheduled to start on 6 February and to finish on 12 February at 08:00 a.m.

Verify in detail if all CO equipment (in particular RF pulse repeaters, OASIS, ...) in old MCR room works correctly. The action can be closed. All the concerned equipments have been tested and, where needed, repaired.

Status of the SPS orbit correctors. The action can be closed. The power converters of the correctors have been repaired. It is not clear yet what caused the over-voltage that destroyed all the HV protections.

2. Status of the machines

Linac2 (mails from F. GERIGK and R. SCRIVENS):

Concerning the status of the Linac2 (mail from F. Gerigk):

“... The only thing to report is that we are in the process of starting up the Linac and that we have not seen any difficulties so far. We should be ready to give beam to the Booster tomorrow afternoon (02/02/10).”

Concerning the radiation alarm protecting the Linac4 civil work . (mail from R. Scrivens):

“The concrete of the Linac4 tunnel roof has now been poured. In these conditions, the PAXS22 radiation monitor is set with an interlock level of 12 μ Sv/hr (averaged over 25 minutes). The interlock acts directly on the safety chain, as before.

This is only slightly lower interlock level than last year (but now without the bouchon as shielding).

First measurements yesterday suggest this will not be a limitation for intensity at Linac2.”

PSB (B. MIKULEC):

The different checks of the machine are ongoing, without any major problem found so far. The patrol and the DSO tests were already done. The only concern left about the safety chain is under discussion between G. Roy and S. Hutchins. One of the elements of the safety chain is out of service and can be repaired only on Friday. The machine can be started in any case.

All the signatures to allow the beam injection in the machine have been collected. Once the PS beam permit is signed beam can be injected.

S. Hancock asked if there is a particular reason for not having changed the PMs of the BWSs as planned. L. Soby replied that the PMs would be ready in April for installation, i.e., for the planned technical stop.

The operation of the week foresees the preparation of the LHC beams in parallel with the delivery of the beam for AMS.

PS (G. METRAL):

The HW tests as well as the repair of the MPS are proceeding. The intervention on the MPS revealed to be longer and more difficult than expected. The MPS is now expected to be available by next week.

The power cables of the 13 MVA transformer have been repaired. However, the figure-of-eight loop could not be tested because of a problem with the distribution of the B-train. Once this was solved, the magnetic cycle for AMS could be prepared. The cycle is different from the normal SFTPRO since the 13 MVA transformer limits the maximum achievable Bdot. In order to maintain the same injection and extraction time as the normal SFTPRO, the flat bottom at 3.5 GeV/c and the extraction flat top have been shortened as much as possible. The beam will be delivered with the MDPRO user to avoid detuning the operational user. All the equipments necessary to deliver the AMS beam have been tested and are ready for operation.

The EPC experts require 30 minutes to test the spare control card of the PFW regulation. The tests will be done just before beam injection in the machine.

The power converter of the figure-of-eight loop has been changed. During the 2009 run, the circuit was powered by the spare power converter. The normal converter has been put back in operation.

The vacuum of the ring is at operational levels, and the sectors valves will be opened in the afternoon.

Current leak tests were done with the 14 GeV/c cycle; no problems were found.

D. Chapuis had to change three other cable connectors of the access system damaged by the flood during the Xmas stop.

The supercycle for the AMS run will be 34 bp long with two MDPRO cycles.

E. Mahner asked if beam based realignment is foreseen also for this year. S. Gilardoni replied that this is not the case. Since none of the main units has been removed during the Xmas stop, in theory the orbit should not have changed with respect to 2009. A check of the orbit will be done in any case as soon as possible.

SPS (K. CORNELIS):

The HW checks are progressing. The problem of the orbit correctors has been solved.

The timing of the transverse damper has to be checked.

One of the new compensators had a problem during last week. Some of the mechanical pieces keeping together the windings were found damaged. The PO experts could put back in operation the old compensator to deliver full power to the SPS. The new compensator repair should be finished by today.

The NA DSO tests were ongoing during the FOM meeting. As the primary water cooling circuit is not yet available, only the functionality of the elements can be tested and not at full current. The tests will be done as fast as possible since the secondary water circuit cannot keep the temperature at an acceptable level for a long time.

The DSO tests in the SPS will take place on Wednesday. Immediately after that, beam can be injected.

The orbit correction by magnet displacement has not been scheduled yet. It will be tried to deliver beam to AMS without having done the correction, and to schedule the correction campaign after the AMS run. The realignment is necessary since a certain number of magnets have been exchanged during the Xmas stop.

A number of interventions remain to be done after the AMS stop and before being in good condition to deliver beam to the LHC.

North Area (L. GATIGNON):

AMS has been installed in the NA on Monday.

TI (E. LIENARD):

Nothing to report.

3. Schedule / Supercycle / MD planning

The 2010 schedule (V1.3) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.3.pdf

K. Hanke presented the schedule of the machines for the AMS restart. The schedule can be found [here](#).

The AMS run is planned to finish on 12 February at 8:00 a.m. to allow starting the necessary interventions for providing beam to the LHC according to schedule.

K. Cornelis added that, due to the interventions needed on the RF, it will be very difficult to provide beam to the LHC on 15 February. K. Hanke will check with the LHC when the beam has to be delivered from the injector complex.

The CNGS run has been approved to start two weeks in advance with respect to the original schedule, i.e., it will start on 29 April. The official schedule, including the date at which the setting up will start, will be issued as soon as possible.

Few doubts were expressed about the schedule of the next two technical stops. K. Hanke will confirm the dates at the next FOM.

A number of CO interventions have been announced and are available via

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

4. AOB

C. Mutin mentioned that the EPC piquet service has already started, whereas the First-Line piquet service will start on Thursday.

5. Next meeting

The next meeting will be held on Tuesday, 9 February 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: Status of the PS MPS (J.-P. Burnet, tbc).
- 5) AOB
- 6) Next agenda

Minutes edited by S. Gilardoni