Minutes of the 15th FOM meeting held on 27.04.2010

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 14th FOM meeting were approved.

Follow-up from the last FOM:

a) Status of the PS-Bfield fluctuations. S. Gilardoni reported that measurements and analysis are progressing and that the first results should be available by the end of the week.

b) PS radial steering GFA replacement/repair. K. Kostro reported that a work-around has been implemented. The GFA programming is sent twice for each user.

c) EAST Area magnet repair. L. Gatignon reported that work is progressing as scheduled. Concerning the faulty quadrupole, the repair could be done in situ.

d) Linac2 source intensity fluctuation. F. Gerigk reported that the intensity fluctuations are still present.

2. Status of the machines

Linac2 (F. GERIGK):
The only problem to mention was related to a faulty generation of the source interlock. The reason of it has not been understood yet. Currently, the entire interlock chassis is being exchanged.

PSB (A. FINDLAY):
The SFTPRO user has been finalised for MTE extraction in the PS.

BE.BSW14L4 was dropping several times. Investigations are still ongoing.

The preparation of the CNGS beam with MTE emittances has been nearly completed. Only the longitudinal plane needs to be finalised.

On Friday, ring3 had an intermittent problem. The Q-strips had to be significantly changed to recover the beam capture. The CO specialist realised that the GFA was

losing the memory from shot-to-shot. The concerned GFA was changed on Friday afternoon.

Also on Friday, the water station tripped causing a stop of 1 hour.

On Saturday, the ring2 C04 cavity was out of service due to a problem with the amplifier. Since the ring2 is not used for the beams presently requested by the LHC, it was decided in agreement with the PS and the SPS to postpone the intervention to Monday.

On Monday afternoon, there were problems with the C02 cavities in rings 1 and 3. This was related to a drop of the temperature of the cooling water, causing condensation on the cavity itself. A valve had to be replaced since blocked in a too wide open position.

K. Hanke mentioned that a brief discussion will be organised to discuss the emittance specifications for the operational MTE beams.

ISOLDE (D. VOULOT):
ISOLDE is starting up with a new HRS front-end ("Front-end 6").

The Vacuum system has been restarted after the major upgrade of the system. The whole facility is expected to be under vacuum by the end of the week.

Protons will be taken from the PSB on Monday 3 May.
Concerning REX-ISOLDE, the EBIS had a problem with He boil-off two weeks ago. The system was warmed up and leak tested last week. The test revealed no leak, so the EBIS was cooled down again and is currently working correctly.

K. Hanke asked if everything is progressing according to the (slightly delayed) schedule. D. Voulot replied in the affirmative.

As a result of the upgrade of the ISOLDE vacuum, the vacuum piquet will be available also for ISOLDE. As soon as all debugging and intervention procedures will be established (minimum of 6 months), a special training session will be organised for the Piquet members. Then, the ISOLDE machine will be introduced in the list of machines under piquet.

PS (R. STEERENBERG):
The PS had a good week.

The MTE beam on the operational SFTPRO user has been delivered to the SPS with an intensity of up to 1.6E13, and it was considered very stable. The beam is considered operational.
The CNGS-MTE extracted beam has been set-up up with 2.3E13.

On Wednesday, SMH16 was tripping a few times. Further investigations will be done by the power converter specialist. J. Borburgh mentioned that the trips coincided with vacuum spikes. This could be related to unusual high losses on the septum.

On Thursday, between 9:00 – 10:30 AM, a part of the radiation survey on top of SMH16 was repeated. The first results will be available soon and presented to the FOM.
S. Hutchins asked when the result of the survey will be available. R. Steerenberg replied soon, since they were already discussed during the PSRWG. H. Vincke mentioned that the radiation levels were pretty high. S. Gilardoni added that this is not surprising and as expected. K. Hanke asked that the results be presented to the FOM

On Friday, the trip of the PSB water station caused also TT2 to trip.
During the beam stop at noon, a part of the fire detection system in the tunnel was repaired.
A faulty 40 MHz cavity was replaced by the spare and permanently repaired on Monday.

On Saturday, the 10 MHz cavity C36 stopped working and was replaced by the spare. The cavity was fixed on Monday.

Concerning the GFA problem of the radial steering and of the BLOW3, as mentioned by K. Krostro, a workaround was found. The GFA is sent twice. R. Steerenberg wanted to thank N. De Metz-Noblat for the intervention.

EAST AREA:
H. Breuker reported that the counting rooms in the area are still empty after the renovation. L. Gatignon replied that M. Lazzaroni should take care of re-installing the equipment needed in the rooms.

AD (T. ERIKSSON):
The AD was in its second week of setting–up. The high energy optics has been improved. Some further optics tuning on the intermediate energy part was done to optimise the deceleration.
The control of the e-cooler has been fixed. The first electron beam was observed, as the first sign of cooling at 300 MeV/c. Also the setting up of the optics during the cooling has started.

S. Gilardoni asked if the primary beam is fine. T. Eriksson replied that this is the case, except Monday when the beam was not regularly delivered. R. Steerenberg replied that there were INCA MDs ongoing. The MD was progressing well, but there was a minor misunderstanding on the supercycle composition.

SPS (K. CORNELIS):
On Monday, the CNGS area was closed. The extraction for the CNGS was set up with the low intensity beam on Thursday. Then, a 1.5E13 MTE beam was taken up to the CNGS target. OPERA could start to take data already.

The nominal LHC25 beam setting up for the MD could not be completed due to a leak identified on a main magnet. In particular, the transverse/logitudinal damper setting-up could not be finished.

On Friday, the SPS stopped due to the mentioned leak in sector 2. During the weekend, only a few pulses were done to fill the LHC. The magnet was exchanged on Monday.

Also on Friday evening, during a short period the beam dump was triggered by a spurious interlock from the SPS proton inflector.

The DSO tests of the North Area are completed.

There was a problem related to one of the doors of the old SPS-LEP transfer line. Someone broke the soldered door, allowing direct access from the SPS to the LHC. The door will be soldered again and the area patrolled before the LHC can restart.

North Area (L. GATIGNON):
The DSO tests went fine.

CNGS (E. GSCHWENDTNER):
The CNGS setting-up went fine. OPERA could already take some data during the setting-up.

CTF3 (D. MANGLUNKI):
The area cleaning finished two days in advance with respect to the schedule. Evaluation works started for the replacement of the 400 cables damaged during the fire. A meeting will take place next week to define the new schedule. K. Hanke suggested that they come back and report to the FOM as soon as plans for the re-start materialise.

TI (J. NIELSEN):
There were three perturbations of the electrical network (20, 24 and 27 April).
The perturbation of 27 April concerned BA3, whereas the other two were on the EDF side.

The cabling of the transformer has been finished. The transformer can be put back n operation whenever possible. This has been added to the call-out list in case of an unforeseen stop; otherwise it will be done during the next planned technical stop.

LHC interface with injectors (M. LAMONT):
The commissioning is progressing well. The squeeze was done to all the IPs. The beta* has been reduced to 2 m, which will be the nominal condition for the next two years.
The experiments were satisfied with the data collected.
The LHC will be in technical stop until Thursday morning.
After the stop, the program foresees an intensity increase up to 10E11 per bunch.

N. Cohan asked if the intensity corresponding to the damage limit has been passed. M. Lamont replied in the affirmative, adding that the LHC is running without any masked interlock.

3. Schedule / Supercycle / MD planning

The current 2010 official schedule (V1.6) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.6.pdf

Presently a 3-day MD is ongoing until Thursday. Since a part of the MD is lost due to the SPS magnet exchange, the physics program will resume only at the moment when the LHC re-starts.

Linac3 will start in week 18.

As key persons in the ion injector chain had already planned their absences around the previous schedule, D.Manglunki suggested to keep the LEIR, PS and SPS startup date with the ion beam as there were planned originally. In addition this gives two more weeks of contingency for MDs in view of the nominal beam and fragmentation test.

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, 4 May at 10:00 in 874-1-011.

Preliminary Agenda:

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Minutes edited by S. Gilardoni